

# Manufacturers Record

Exponent of America



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Baltimore, Md.  
APRIL 15, 1920

## THE LABOR SITUATION AS VIEWED BY MANY EMPLOYERS

Many men are criticizing labor as inefficient and non-productive and claiming that most of our present economic difficulties are due to this fact. Some are definitely committed to a desire to deflate business and thus reduce the demand for labor, and in that way make labor work with greater energy in order to keep its job. The MANUFACTURERS RECORD does not agree with any of these views, and it is glad to say that the men who hold them are largely, we believe, in the minority.

In order to get at the facts as seen by large employers of labor in all parts of the country, we lately asked the views of a number of leading business men on these important questions, which are so vital to individual and national welfare.

Is labor growing more, or less, efficient is one of the greatest questions before our country. The answer as given by men of wide experience is published in this issue. These letters form a symposium worthy of the thoughtful study of the whole country.

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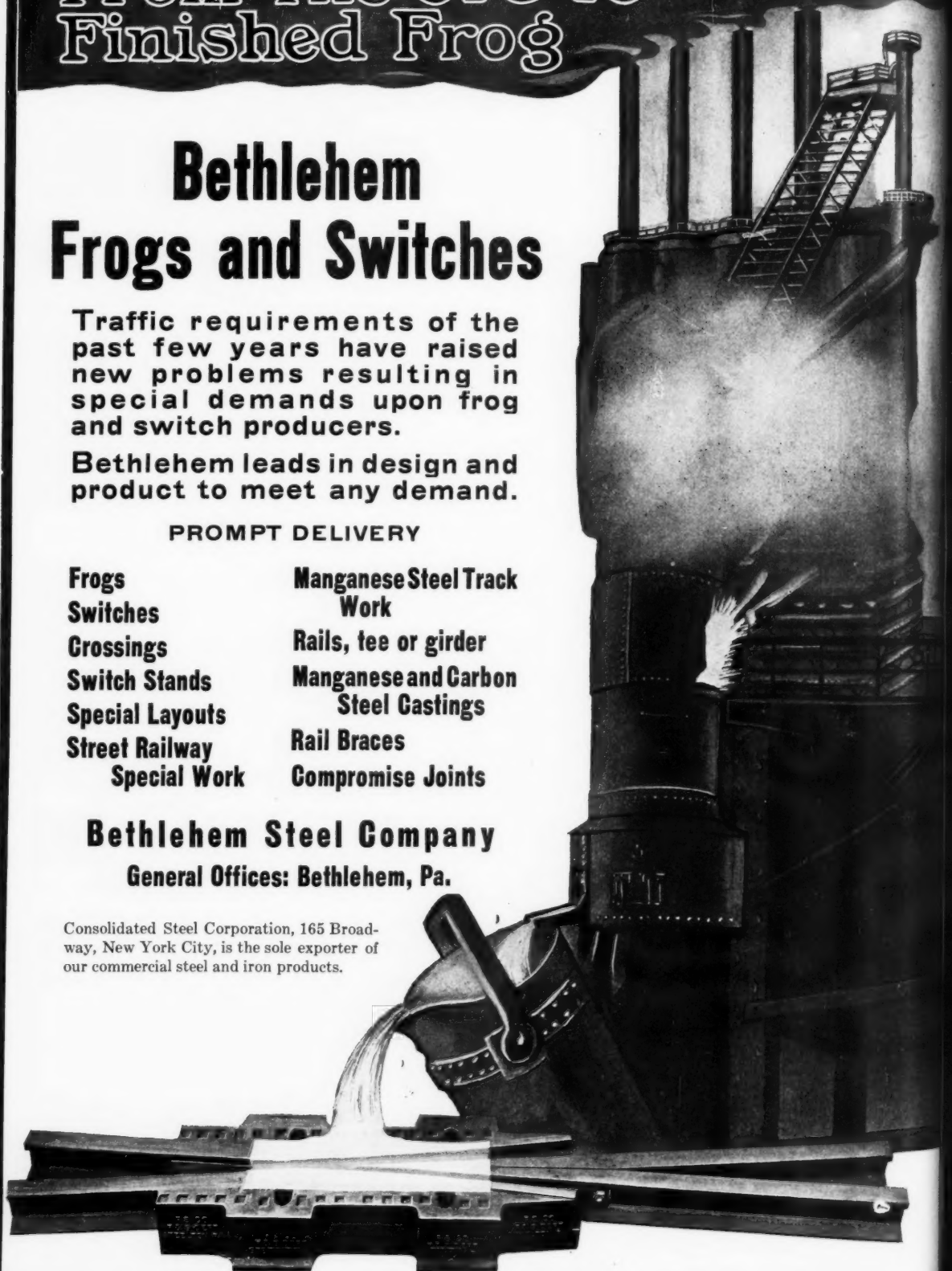
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Exponent of America

APRIL 15, 1920.

Volume LXXVII.

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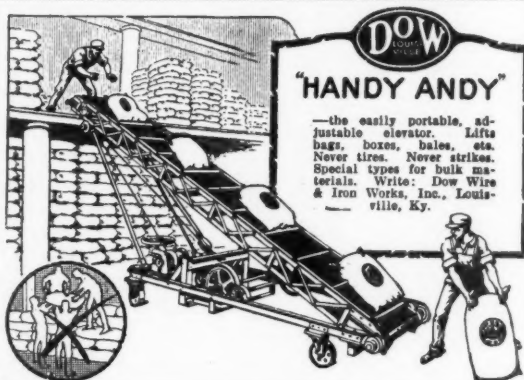
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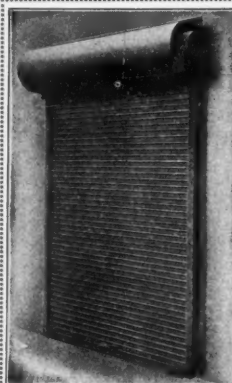
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# Manufacturers Record

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Devoted to the Upbuilding of the Nation Through the Development  
of the South and Southwest as the Nation's Greatest Material Asset

Trade-Name Registered in the U. S. Patent Office

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WEEKLY. }

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In order to avoid delays, all correspondence pertaining to news or advertising matters should be addressed directly to the Manufacturers Record, Baltimore, Md., and not to individual editors, officers, employees or any branch office.

## DELAY IN DELIVERY.

The Manufacturers Record may reach its subscribers late with this week's issue.

On account of a strike of the bookbinders of Baltimore, necessitating a makeshift in the binding of the Manufacturers Record, the orderly working of the mailing department has been interfered with, and there is likely to be an unavoidable delay in deliveries.

## "ON TO BERLIN!"

Sapulpa, Okla., March 29.

Editor Manufacturers Record:

May the firm and tender hand of Almighty God remove the scales from the blinded eyes of the Allied Statesmen (?) and may the light of His Spirit drive the fog from their beclouded minds and permit them to behold the truth, the solemn truth, the wisdom, the warning wisdom contained in your editorial, "On to Berlin!" as published in the MANUFACTURERS RECORD March 18, 1920. You are doing a marvelous work. May your powers be strengthened and your years lengthened. J. H. N. COBB,

Secretary Sapulpa Chamber of Commerce.

## HONESTY IS THE BEST POLICY.

THE Government is going into the market and buying its war bonds at a discount of 10 per cent, retiring them, and simultaneously it is issuing short-term notes at par, bearing a rate of interest higher than any of the war bonds pay.

The Government, in other words, will borrow today at par in order to buy back at a discount previous obligations, the value of which it had solemnly promised the purchasers it would protect.

Were a private company guilty of as shameless a financial immorality, without doubt the Department of Justice would waste no time in indicting its officials.

Honesty is the best policy.

## GREAT WHEAT SHORTAGE ENDANGERS OUR FOOD SUPPLY.

WHEN the wheat acreage last fall showed a decrease of 25 per cent and the rye acreage about the same percentage of decline, we repeatedly warned the country that this was merely an indication of lessened farm operations which should give serious concern to the whole country.

The report of the Department of Agriculture just made, that the winter wheat yield promises a decrease of 248,000,000 bushels, or a falling off of over 33 per cent, compared with the preceding year, is even worse than we predicted, and indicates a probable food shortage of alarming proportions.

The entire wheat yield will fall far below the actual consumptive requirements of the country, and there is no possibility of the spring-seeded wheat crop making up this vacuum and leaving any large quantity of wheat for export. The country will, therefore, be compelled to use up all of its reserve stock of wheat, and the following year we will be practically entirely bare of wheat.

This inevitably means very high prices for flour, and other foodstuffs will naturally follow. All the wild vaporings of Washington politicians will thus prove to be merely the empty mouthings of time-servers, who seem determined to refuse to face the truth.

Three years ago President Wilson urged the editor of the MANUFACTURERS RECORD not to make public the actual facts as to the steady tendency to a decline in food production in proportion to population, but we were compelled to write him that the American people were entitled to know the truth in order to face intelligently the steadily rising cost of foodstuffs.

The present alarming decrease in wheat is only one of the signs of the times indicating that this nation must meet a food crisis far more serious than it has ever known. It is now incumbent upon everyone to encourage to the utmost extent the raising of sweet potatoes, white potatoes and other foodstuffs which it is not too late to plant. Unless this be done the present prices of food will, a year or two hence, look very cheap, indeed.

It is not yet too late for the Administration to do good by concentrating the thoughts of the country upon this food famine prospect ere it be too late. It is of more vital importance than all of the political tomfoolery with which Washington is deluged—far more important, indeed, than the peace treaty and the League of Nations.



## NO PERMANENT PEACE OF LABOR AND CAPITAL AND WORLD AFFAIRS UNTIL ALL LEARN TO FOLLOW A DIVINE COMMAND.

THE editor of the MANUFACTURERS RECORD has not thought of any pride of authorship in regard to the editorial printed last summer, which is still being reprinted throughout the country, entitled, "Am I My Brother's Keeper?" but so many letters of commendation continue to come in regard to it that we are glad to extend its circulation, hoping that its wide reading will continue to do good. For that reason alone we feel justified in reprinting some of the over-enthusiastic commendations which come to us. Mr. H. M. Johnson, general manager of the Maldezone Chemical Manufacturing Co. of Memphis, in a letter of commendation of "Am I My Brother's Keeper?" which has been published in leaflet form, says:

"We have been very fortunate in receiving what I consider to be the best sermon ever preached by mortal man, 'Am I My Brother's Keeper?' which now occupies a prominent place on the wall of my office.

"If it was not for the Devil's strongest temptation for man (avarice and greed), this sermon, if read by every human being, would give us the greatest Government in the world, as there is coming a day when we will all be forced to realize the fact that we were put here as our brother's keeper.

"I also appreciate very much the small edition enclosed in your letter, which I shall now carry in my pocket, and it will be a pleasure to use this sermon whenever I find a grasping, avaricious man who has lost sight of the fact that he is his brother's keeper, as it is the best argument that could be offered upon this subject."

### "THE SLOW SOUTH!"

SOME people are constantly inclined, because they do not know any better, to criticise the South, saying that it is slow. A sample of "Southern slowness" was given a few days ago at Daytona and Deland, Fla., when a big fire in one of Daytona's leading hotels threatened to become dangerous. The fire occurred at about three o'clock in the morning. A telephone call was sent to the neighboring town of Deland 22 miles away asking for help and within 48 minutes from the time the telephone bell rang at the Deland Fire Department, the Deland engine was throwing water on the Daytona fire. If there is any fire department in the East that can travel at three o'clock in the morning 22 miles over a road made slippery by rain and begin throwing water in less than three-quarters of an hour from the time of the call for help we would like to know about it.

This Daytona fire was superbly fought by the local paid and volunteer fire department, and its work suggests that every town in the country should have a thoroughly equipped modern fire-fighting department. A year ago, despite the opposition of some Daytona people who were afraid to incur the expense, a remarkably fine combination pumping engine and hose wagon was secured. It has tremendous power. Twice during this winter it saved the town from the danger of a great conflagration and has many times over paid for itself within the twelve months. It was an addition to the fire department's equipment which some thought unnecessary.

The waste of fires in this country runs into the hundreds of millions a year. Insurance does not pay the cost because the people have to pay the premiums on insurance, and therefore, the cost of every fire comes out of the pockets of the people of the country.

It behooves every community, large and small, to have the very best fire-fighting equipment that can be provided. The cost, therefore, is but a bagatelle as compared with the saving effected. Not all communities are thoroughly protected

against fire by ample equipment, handled by intelligently directed firefighters, and not until then will it be possible for an adjustment of insurance rates sufficient to reduce the heavy burden of insurance premiums in badly located sections of every community or in the danger zone where it is difficult to prevent fires or to put them out when once they start.

Daytona and Deland have met the fire fighting situation and have given an example to the whole country and have proven that though the South is often charged by ignorant people with being "slow," it can match any other section of America in the spirit in fighting a fire as it can match any other section in energy and activity, fully recognized by people who are informed as to what the South is doing and what it is capable of doing.

## DEVELOPING FRIENDLY RELATIONS BETWEEN RAILROADS AND PUBLIC.

THE spirit with which the railroad people are taking up the problem of re-establishing friendly relations between the public and the railroads is one of the most hopeful signs in connection with railroad work. It promises to bring about great results, for with the hearty co-operation of the officers we feel sure that railroad employees generally will soon show an active interest in developing that friendly relation which should exist between the public and all railroad employees, from the office boys to the president.

A recent circular issued by Mr. H. S. Leard, supervisor of passenger operation of the Seaboard Air Line Railway Co., is indicative of the spirit with which railroad officials are working on this matter. This circular is as follows:

Seaboard Air Line Railway Co.

Circular Letter No. 1.

Courtesy—The Keynote of Our Service.

To All Seaboard Employees:

It should be a matter of great pride, to all of us, that during the strenuous period through which we have just passed, that so few complaints reached me as to discourtesy shown by you at any time to our patrons or to the outside public, especially as these criticisms were invited. This speaks well of our organization, and I am sure that you will continue to keep up this enviable record. Courtesy is efficiency in its highest sense; courtesy makes friends; friends mean patrons, and, best of all, pleased patrons.

Remember, that to the outside public you represent the Seaboard, and that they are apt to judge all of us by your actions; therefore, protect us, as well as yourself, by transacting business and especially by answering their questions in a polite and courteous way, making friends for your railroad, at the same time laying a strong foundation for your future advancement in the service.

The spirit of loyalty has always been strong among the employees of the Seaboard; especially was this true during the late war, when we met every request of our Government, both at home and in France. Now that our railroad has again been placed in our hands, and that the success of same means better things for us, we should do all in our power to promote its development and progress. I am sure that you will agree with me that no one thing will help to bring about this desired condition more than to meet our friends, our patrons and the general public in a pleasant and courteous manner.

I am sending you this letter to remind you that under the changed conditions, which have just come about, the public as a whole is going to expect more of us in every way than ever before; they will watch us closely. The Seaboard will bear the blame for every discourteous act of yours and mine; therefore, we will have to "hold ourselves blameless" in order to live up to our reputation.

I am positively sure that there is no place in the Seaboard organization for a discourteous employee.

Yours for courteous service,

H. S. LEARD,

Supervisor Passenger Operations.

Norfolk, Va., March 22.

## The Grunau Rebellion

**C**ONTINUING their tactics of boring from within, under a leadership stained all over with Teutonism, making no demands, reciting no grievances, but simply running amuck in the highways of society, certain railroad employes have defied their own organizations, poured filth on their pledges and have succeeded in putting the transportation machinery of the nation out of joint.

There never was a strike so bankrupt of excuse. Nobody knows what it is about. It is simply a seditious uprising. But it has a leadership. There is a brain behind it somewhere, and it is the brain of a revolutionist. Moreover, it is a movement of destruction, and is aimed not only against the Government, but against all government.

All through the long period of formulation of the railroad bill it was repeatedly shown that one way in which the country could be protected against such invasions from within as this one was by the enactment of an anti-strike provision. The case was stated in the most convincing way by Senator Underwood and by many others. But politicians in the House were afraid, on the eve of a national election, to stand for such a remedy. They preferred to compromise, and they forced the Senate to do likewise.

If it be objected that even an anti-strike provision would not have prevented such an outburst as this one, the answer is that it would at least have put the conspirators within dread of the law and would have given the Government an efficient instrument with which to oppose the uprising. It may be true that there is no legislative solution of the strike question, but it is sheer nonsense to contend that there is not a legislative solution that will keep open the arteries of national commerce. Because the Kansan industrial code has been challenged and is still on trial it does not follow that national protective measures to keep trains running would be futile.

Without any legislation whatever President Cleveland, a believer in law and order, did keep trains running during a greater strike than this one. But in the absence of an anti-strike provision in the new transportation act, the Department of Justice leans toward the Lever Act for authority to move against the rebels. That is unfortunate—doubly unfortunate unless carried to a conclusion—for the reason that the Lever Act is still operative by the merest accident. Use of it subjects the Government to the charge that it is using extraordinary powers, granted only for the purpose of making war against the Hun, for law enforcement at home. It is a charge without much merit, since the strike is a consequence of war conditions, but it makes progress among the uninformed and in some strange way discredits Government.

There should be some way in which the nation can protect itself under the ordinary law, without recourse to the extraordinary legislation provoked by the war.

It is pertinent, for instance, to point out that if the unions had been compelled to incorporate and if their accumulated funds were subject to attachment for breach of contract, it is doubtful if an "unauthorized" strike of this kind could have made much headway. But nothing binds a union member

to his union except his word, and it is established that there are numbers of men to whom that means nothing. What is the wisdom of dealing with organizations which from the beginning renounce responsibility?

The Government need not, at this juncture, concern itself with the merits of the controversy, if there are any. The condition the country faces is too appalling for that. Act first and debate afterwards. For were the strikers backed in fact by a list of grievances miles long, they would still be without any justification for their action. They are potential murderers, since millions of citizens are threatened with an absolute stoppage of food supplies. To tie up transportation is to besiege the nation. It is an act of war, and those guilty of it are entitled to no consideration.

This constant calling on the Department of Justice when the supreme might of the nation ought to be in operation against rebellion is wearisome. What Washington ought to do is to see that trains operate, even if the army has to operate them.

There are rights inherent in any Government which need no statement in statute form. By common consent they exist. The supreme law—greater than Constitutions or Congresses or any of the machinery of Government—is the duty of a Government to maintain its existence and to protect the lives of its people. When John Grunau or anybody else undertakes to starve the people of the United States, he becomes a public enemy and ought to be treated as such. Declaring martial law is an extreme proceeding, but it ought without hesitation to be resorted to in cases such as this strike, unless immediate relief can be otherwise obtained.

It is true that no man can be made to work, but on every man there rests a responsibility toward his neighbor. If simultaneously a number of men leave their jobs, and if by so doing they prevent the operation of an essential public service, what they do is not simply to exercise a right of idleness, but they commit a constructive assault on the whole people. They do a perfectly legal thing for an illegal purpose. They become conspirators, and the only way to treat them is as conspirators.

"I have asked no parley with the other side," says this John Grunau. "The other side" happens to be the people of the United States. Grunau has asked no parley with them and they should have none with him. His belligerency, to put it mildly, is unofficial. Since he is waging war against the United States, a policeman should arrest him. It would not be necessary to send the battle fleet against him.

There never was a law more fair to laboring men than the transportation act. It provides the fullest machinery for the composition of disputes. No men with just grievances need fear their redress under the legal methods proposed. But these strikers are not after relief. Some may think they are, but their leaders know better. What they really want is to break into the company treasuries, which are the people's, and abstract what they please. What they want is the establishment of a reign of indiscipline. They long for confiscation and they hope to see in America a repetition of



those dread scenes which have stained the stones of Russian cities so that not even Time itself will ever be able to wash them clean again.

Men, toiling through the ages, have constructed the vast and intricate machinery of modern life. At the throttle of that machine have been put the railroad employees. Admittedly they are thus clothed with a virtual power of life and death over the whole people. It is a power that lies in the hands of every physician when he enters a sickroom. The patient's life is at his mercy. He can prescribe poison instead of healing drugs. That is the physical fact. But if he does so he is a murderer. "Pay me double the usual fee or I shall kill you," is not the ethics of the profession. So, too, the life of any citizen is at the mercy of his neighbor if the neighbor cares to use the death-dealing implements which civilization has made available. But men who use their pistols in that way are considered highwaymen. What difference is there in principle if an association of railway employees, instead of using a pistol, use the transportation system wherewith to murder their fellow-citizens? There is none, and yet this man Grunau talks about asking "no parley."

The time has come when there must be a showdown in this country and in some other countries. Some pessimists think that another civil war is in sight. Some others favor having the financiers do what the strikers are doing, namely, defunctionize an essential part of the machinery of civilization, thus bringing about a panic. Still others favor yielding to the strikers and handing over to them the wealth of the nation to play with. But the crisis is not more grave than it was in Coolidge's time. Unrest is not so widespread. All that is needed is an end of flabbiness in high places. All that is needed is a firm statement of the supremacy of law and a determination to enforce it—a Coolidge in the White House, say. There is no respect for authority because authority does not respect itself. There is no respect for authority because authority is casual and indecisive.

Some learned men make poor school-teachers. They are split on the rock of discipline. Given control of a study hall in which are 50 boys, they find themselves an hour hence in bedlam. The answer always is they talk too much. At the first sign of disorder they issue threats of punishment selecting the culprits by name. They lose that supreme agent of order—ignorance of what the punishment is going to be, but assurance of its infliction. The wise tutor, on the other hand, sitting with a hundred boys in a study hall, can hold them in complete subjection. But he issues no threats. At a sign of disorder he looks over the whole room, says nothing, but makes a note with his pencil and all see him do it. None knows whether he has been caught or not. Each in disorder fears that he has been discovered. All are certain that punishment awaits infraction. In ten minutes an unwise instructor can ruin a disciplined classroom. The trouble in this country, and in the world, is that the foundations of discipline have been shaken to their depths by forces which, instead of enforcing discipline, have invited indiscipline. Rioters no longer fear the irrevocable decisions of

Washington, because they know they are revocable. To them Government is not law, but politics.

It may be doubted if the present Administration, even by heroic action, could restore that confidence in itself and respect for itself which would presage a return to orderliness. Its record is too wobbly. But the people of this country, in November, can go a long way toward settling the strike menace and conspiracies against the public weal by electing a President who will maintain law and order, and who, all men know, will do so without compromise and without equivocation.

Labor is unstable because Government is unstable.

## DOMESTIC TRADE CROWDING OUT FOREIGN TRADE.

AN indication of the magnitude of the domestic trade which is absorbing the entire product of some of the biggest houses of the country and making it impossible for them to handle foreign trade is illustrated in two letters received by the MANUFACTURERS RECORD within the last few days. We had an inquiry from Africa for certain lines of goods. This inquiry was sent to a number of wholesale houses, and from two of the largest in the country, Sears, Roebuck & Co. of Chicago and the American Wholesale Corporation of Baltimore, we have received replies to the effect that they are not in the position to handle any orders outside of the United States.

Sears, Roebuck & Co. wrote as follows:

"We thank you for your kindness in referring to us the request of Mr. Simon George of Kano, N. Nigeria, Africa. However, we are sorry we cannot accommodate him, because the catalogue would be of no service to him, since our foreign department has been discontinued on account of the increase of our domestic business, and we cannot accept orders for shipment to foreign countries.

"We are not, therefore, sending a catalogue, because it would be of no service to anyone in Nigeria.

"If, at any future time, we are in position to accept orders for shipment to places outside of the United States, we shall be glad to be of service."

This shows that the activity in the development of their domestic business has been so great that they have even entirely discontinued their foreign department.

A somewhat similar letter comes from the American Wholesale Corporation, formerly known as the Baltimore Bargain House, one of the largest wholesale houses in the country, which writes as follows:

"We are in receipt of the copy of letter from Simon George, Kano, N. Nigeria, Africa, for which please accept our thanks.

"We regret, however, that owing to the fact that we are not taking on any export business at the present time, we will not be able to handle this gentleman's account."

American business men are constantly being berated because they do not develop foreign trade with the same energy with which England and Germany and other European countries handle their foreign business. But these two letters from two of the biggest concerns in the country indicate that the volume of our domestic trade is so great that they do not have any opportunity to handle foreign business, and that is a condition which many business men of this country are constantly confronting.

## Necessary to Housekeeping.

S. H. BOLINGER, President S. H. Bolinger & Co., Shreveport, La.—We could hardly keep house without the MANUFACTURERS RECORD. Our only regret is that this cannot be read by every citizen of the country, or some equally as sensible editorials and other articles be distributed through our magazines, so as to reach everyone.

## Have the Eastern Trunk Lines Begun to See the Light?

**M**R. MILTON H. SMITH, president of the Louisville & Nashville Railroad, advises us that "a committee has been appointed of representative Southern lines to meet with a corresponding committee representing North Atlantic ports with a view of reaching some settlement of the pending question," the reference being to export rates via South Atlantic ports.

These export rates are covered by what is known as the Speiden Tariff No. 95, and the original report that the Pennsylvania lines would not accept the new rates arose from the fact that the Pennsylvania had filed with Mr. Speiden a power of attorney, with the proviso that it would not apply in connection with this Tariff No. 95. It was denied by the Pennsylvania officials at the time that this interpretation was correct. We are now authorized to state that the Pennsylvania Railroad takes the view that the instructions of Mr. Speiden had nothing to do specifically with the rates to South Atlantic ports, but constituted a general and technical action in regard to future Speiden issues as a matter of tariff publication. The Pennsylvania Railroad, we are authorized to state, does not intend to take any "arbitrary action" in regard to the rates in question.

As a matter of fact, Mr. Speiden has been supplied with the necessary concurrences by both the Baltimore and Ohio Western lines and the Pennsylvania Western lines, but not by the Eastern lines of either road. The effect of this is to keep the most essential rates alive, although it does not preclude future action on the part of both systems to annul the rates involved.

It seems to have been established beyond all question that the reasonableness of the new rates is beyond attack, and the any, is in regard to territorial delimitation of the section over any, is in regard to territorial delimitation of the section over which the rates shall be operative. The trunk lines are evidently inclined to throw the boundary line too far west.

While we applaud the effort of the railroads to reach an agreement among themselves, it is obvious that the committee representing the Southern roads should refuse to consider any compromise on the greater part of the territory involved and should restrict the discussion entirely to the geographical eastern boundary line.

It would seem to be absurd, for instance, to deprive shippers in Pittsburgh of the benefit of a South Atlantic outlet. As this is written the longshoremen's strike in New York has tied up that harbor to such an extent that a general embargo on shipments thither is in force. It is invariably the case, in trying to force traffic through the neck of a bottle, that any obstruction becomes shortly a complete stoppage. The strike in the coastwise trade, to illustrate, is not delaying export shipments through the South Atlantic ports, where traffic is moving with the usual speed, but it has paralyzed New York. When such drastic interferences with trade occur, Pittsburgh shippers should have another outlet available, and the only way they can get it is by having the right to an equitable freight rate in routing goods through Southern ports.

We do not believe that the Eastern lines could establish a case before the Interstate Commerce Commission or obtain any governmental sanction for choking the South Atlantic ports. Time was when such things were possible, but that was long ago. True, long enjoyment of a lucrative privilege emboldens the recipients to believe that it is their right, but the processes of justice are nevertheless inevitable. The Southern ports have been worm-eaten and subject to dryrot, not because of any lack of initiative on their own part, but be-

cause they were absolutely chained by an economic practice from which there was no escape. The attempt to free them has been a long one, but they have at last tasted what freedom means, and never again will they go back to the old status.

What made the statement of President Fairfax Harrison of the Southern Railway system, in which he declared that his road would stand by the Southern ports, so sensational an utterance? It was, perhaps, because for so many years the executives of the Southern roads were so docile in the hands of skilled competitors, so willing to sacrifice the interests of the section they served, so lacking in energy when approaching the big programs and principles underlying the successful building up of ports. They showed little enterprise, little devotion to the territory they served. It is not too much to say that they earned, as a result, a suspicion of themselves that is not yet entirely eradicated from the Southern mind.

Mr. Harrison did more than make a statement. He gave notice of a new era. The committee of the associated lines, therefore, must live up to the new standard by successful negotiations with the Eastern lines. If the committee should come out of the conferences with its tail between its legs, if it should come out with a greasy compromise in its hands and the Southern ports again under the thumb of an economic master, the effect would be not only utterly to discredit the Southern lines, but also to confirm the South in the belief that it had nothing to hope for in the way of justice unless by political action.

Mr. Harrison and the gentlemen associated with him will have the backing of the whole South and also of the great and prosperous Midwest, representing in gross more than half of the people of the United States and a majority in each House of Congress. A movement with such support is likely to be a just movement, and the sunlight of success crowns it from the beginning.

The railroads are back now in private hands. How long they will stay there no man can foresee. Private operation is on trial and a great organization is in existence which has no other purpose than to discredit it. Today the masses of the people are against public ownership, but if ever again it becomes apparent that private owners can use their power to ruin whole sections of the country and decree their everlasting poverty, then those sections will turn for relief to the only authority able to give it, namely, the Government.

The curt notice last fall by Mr. Daniel Willard of the intention of the Eastern roads to contest the rates which give the Southern ports a chance to live was, therefore, worse than a mere blunder. It exposed the selfishness of private interests at a time when, above all things, it was requisite that agencies serving the nation in a semi-public way should arouse confidence in their good intentions and the patriotism underlying their activity. The South felt that Mr. Willard had slapped it in the face, and the Midwest felt the same way. It is probable that Mr. Willard and his associates have since then seen things in a clearer light, and they are to be applauded for it. They can atone for the blunder by refusing further to move against the just rights of the Southern ports. That is what we hope they will do, and certainly it is what they ought to do.

It is too early to conclude that the fight is over. It may have just begun. It behooves all Southern and national interests, therefore, to be vigilant and keep their eyes open until a final result has been achieved. But at least the ground has been laid for conferences which should result in a friendly agreement on the part of the trunk lines to let the Southern ports also have a fighting chance.

## Let the Government Be Honest!

**M**R. MAGEE of New York has introduced in the House of Representatives a resolution calling for the appointment of a committee to conduct hearings on the depreciation of war bonds and make recommendations for legislation devised to bring such securities back to par.

He makes no criticism of the Federal Reserve Board, but feels that extended hearings may lead to a clear apprehension of the causes of depreciation, which, when understood, may be corrected.

One of Mr. Magee's constituents, for patriotic reasons, purchased \$70,000 of war bonds. He expected to pay for them gradually out of income, as it was promised he could do, but he was forced, nevertheless, a short time ago, to sell his bonds at a loss of more than \$7000. That is what his patriotism cost him.

But what Mr. Magee is chiefly concerned about in the receipt of protests from numbers of the poor, many of whom had invested their life savings in the bonds, on assurances from speakers that the Government would always protect them. They are the real victims of the Government's repudiation of its promises.

Mr. Magee thinks that possibly the situation can be corrected by exempting from taxation the income from war bonds, or by an increase in the interest rate, or by a definite announcement by Congress of its policy in regard to further issues of bonds, or by some other means yet to be discovered. We suspect, however, that if Mr. Magee's mail could be made public property it would disclose not only bitter protests against the action of the Federal Reserve Board in deliberately forcing bonds out of the banks, but also a very vigorous protest against the Government purchasing its own securities at less than par, with a profit which has already amounted to more than fifty millions of dollars.

We do not subscribe to the opinion that it is a crime to own a war bond and a felony to use it as security for loans. Thieves might blush to hold such doctrines. Did not the Secretary of the Treasury point out to investors that they not only performed a patriotic service in purchasing the securities, but that by buying them they were creating a capital which the exigencies of war would make doubly requisite in time of peace? Be frugal and save, and put your savings into war bonds that when the war is over you may have capital to supply to a hungry world, was the argument. But now when these investors try to use that capital they are frowned on and viewed with suspicion. Buy war bonds! Buy till it hurts! Such were the slogans sent everywhere from Washington. Men were urged to anticipate their savings, not for months only, but for years, in buying bonds. Future incomes of all men should be dedicated to the great purpose of financing the war, it was said. Four-minute men drilled that thought into the hearts of the people. But now we are told that such slogans were mere propaganda and that the men who uttered them were liars. Liars? Why the best men of the nation gladly dedicated themselves to the sale of bonds. They, too, believed what the Government told them; they, too, were fooled.

Mr. Magee does not think that it is right for Congress to sit idly by while investors lose their savings. He thinks it is the duty of the National Legislature to do something to rehabilitate the good faith of the Government. He is right, but hardly so stirred up as he ought to be. And Congress seems not to be disturbed at all. Time was when men blushed if their honor was attacked, but with the honor of the nation at stake, the men in whose keeping it is do nothing; they sit still. Nor is it even assured that the Committee on Rules will ever let Mr. Magee's resolution get to the floor of the House.

The Government has right now a huge floating indebtedness. It is having trouble to float its certificates of indebted-

ness. It is afraid to float another bond issue to take up this floating debt or to pay a soldiers' bonus. Why is it afraid? Does any sane man believe that this great nation would refuse to subscribe a billion or two billions wherewith to recompense the men who stood from the sea to the Argonne, a living barricade against the Hun? No, but what the Government officials know in their hearts is that they have gutted the reservoirs of credit by not keeping faith. They have not the nerve again to ask subscriptions of the masses while in every stock exchange of the country the daily quotations cry aloud that previous promises have been repudiated. The Government could not go before the people with clean hands. It is afraid to go before them with its fingers black.

We see nothing honest in the profits which the Government has made from purchases of its own securities at bargain prices. Those securities are soaked in sacrifice. The losses are the losses of devotion, almost sacred, and for the Government to take advantage of that devotion to its own profit is, we repeat, an immorality which no sophistry can justify and no hypocrisy excuse.

If, in the fulness of God's wisdom, the war had been prolonged; if into that morass of destruction it had been necessary to pour double and treble and four times the part of the national wealth that was dedicated to the beating back of the Hun; if we had been driven so to mortgage our resources that our ability ever to repay had been in doubt, then men, facing still heavier losses in their bond investments, would have uttered no complaint. Good faith would not have entered into the equation, but the inexorable laws of economy. But we came out of the war a year earlier than we expected. We came out strong and mighty. Our assets had been multiplied. Our financial citadels were armor-tight. Magnificent as was and is our indebtedness, it loomed, in comparison with our wealth, as a mere inconvenience. Indeed, comparatively, the debt of the Revolution was an insuperable obstacle to national solvency. No man questions the ability of the Government to repay dollar for dollar. Aye, were the debt twice the amount it could do so. Why, then, do American promises to pay sag in the market, as if they were the commitments of some mushroom republic? Because the Government itself has loaded its own bonds with weights. That is the answer, and every man who knows anything about the situation knows that it is the truth. It is the Government that has poured filth upon its own securities.

Well may the House appoint a committee to investigate. It ought to have done so long ago. Let the men who blush for the nation's honor now stand up and be counted. Let the people know before election those who favor repudiation and those who do not. To do nothing is to favor repudiation; acquiescence is compliance.

Let the Government be honest!

### GOOD FOR HOKE SMITH!

**T**HE Atlanta Constitution, following the lead of John Sharp Williams, denounces the Democrats and Republicans alike who in the Senate fought the League of Nations as a "poison squad." Senator Williams is not a very good leader in these latter days, and it is fortunate for the country and for Mississippi that he will soon be in private life and not attempting to mislead the nation. It is a pity that the Constitution cannot find any better leader to follow.

The Constitution denounces Senator Hoke Smith because he dared to oppose the League of Nations. The MANUFACTURERS RECORD has not always been by any manner of means an admirer of Senator Smith's policies or his various political activities, but in helping to defeat the League of "Notions" we believe that he did the best piece of work that he ever achieved in all of his public career.



## The Government Coddles Profiteering by Its Vicious Tax System

WHILE Congress is gum-shoeing with the soldier-bonus measure and gentlemen supposed to be speaking for the greatest and wealthiest nation on earth are emitting doleful predictions of bankruptcy, it would seem to be time for some sort of statesmanship to manifest itself and strike at the heart of the trouble. Instead of bickering about the question of a bonus, which should voluntarily have been solved long ago, Congress ought by this time to have put the country on one kind of peace footing it needs more than any other—a peace-tax system.

The present revenue law is an economic monstrosity. Few deny it. It was the child of war, born in the stress of circumstance, a measure of expediency, a thing all out of proportion, to be used only in an exigency and then tossed away. Haste made it and procrastination keeps it alive.

During the whole summer of 1918 the Ways and Means Committee fought over the bill. It was not finally enacted until after the war was over. Had Congress been a more wieldy body, it would have abandoned its tax program on Armistice Day and not gone ahead with it. As it was, the strange procedure was followed of enacting a war measure three months after the war had ended, the taxes themselves being retroactive for a year.

A wise man does not hitch a dray horse to a race sulky. When every factory was a Government establishment and immediate production was the controlling desideratum, it did not make a whole lot of difference what price the Government paid for the product if it got a large share back through taxation. The taxation was devised, in fact, to correct errors in price-fixing. It did not make so much difference if a contract was a little higher than it ought to have been if the Government got its share back. That was the theory. Even so, the system was a vicious one, induced that disregard for moderateness which now plagues the nation, led to all sorts of excesses in wages, put a premium on inefficiency and otherwise hurt industry more than is even now realized. But it did produce revenue.

Then the whole structure of Government buying collapsed. The equilibrium—not a good one—which had arisen from having the Government on both ends of the see-saw was destroyed by the Government throwing its whole weight on one end only. No wonder prices, instead of coming down, began to soar. No wonder an orgy of high prices resulted, with the spirit of the profiteer surging in every man, not because of desire so much as of necessity. Prices and labor began to race with inefficiency. The plain truth was that the Government had interposed an anti-gravity screen between prices and the earth.

The screen is still in position. The Government is still taking its toll of profits, still crying for more revenue, and getting it by reason of business taking higher profits. Were there in Washington a sense of real economy; were that extravagant waste of human effort—time and money—which seems to characterize all government at an end; were the Government dedicated, in fact, not to penuriousness, but to businesslike management, then the industry of the nation might survive a taxing system which imposes five dollars of taxation for every dollar that it collects. But when extravagance is fashionable and the expenditures of Government stagger the imagination, a situation is induced which would undermine any financial structure of which the human mind can conceive.

The argument of Mr. Rainey for a general sales tax is unanswerable. "A very small tax," he says, "on final sales would yield an immense sum of money. From a tax of this character we could exclude foods and medicines, and tax every other transaction. There could be no complaint with reference to the tax that some people were being unfairly discriminated

against. It would not bear heavier upon one business than another business. A tax of this character could be expanded indefinitely. We now impose burdensome taxes upon the transaction of business. We tax bonds, the original issues of capital stock, capital-stock sales, sale of produce on exchanges, passenger tickets to Mexico and Canada, proxies for voting at meetings of stockholders, theater tickets, parcels post packages—in fact, there does not seem to be any of the ordinary methods of transacting business which have escaped. Taxing an industry is like hanging weights on the wheels of some great, powerful but easily-disturbed machine. These industries we are hampering do not belong to the men who operate them. They belong to the 100,000,000 people who live here in the United States. The men who operate and control them are only the trustees who have charge of them. We can tax the incomes from industry after they reach the individuals. We should adopt a tax system to include only individual taxes, excise taxes on tobaccos, estate taxes and the amount we can get at our ports out of taxes levied for revenue only."

It is beside the point to state that a tariff for revenue only, now that the revenue requirements are so ponderous, would be the heaviest protective tariff ever known. But the comparatively simple system of taxation which Mr. Rainey espouses, speaking for the best economic opinion of the country, is in the main so obviously sensible and so clearly an improvement on the vicious system now operative that the wonder is that Congress delays in moving forward to it.

It is a matter of supererogation to observe that the party leaders are entirely convinced of the necessity of revising the revenue law. But they do not want to do it before election. That old bugaboo—politics—stands in the way of relief. Probably politics has cost the country more than all the wars in which it ever engaged. But just why any political party should imagine that it will gain votes by neglecting to perform an obvious and essential duty, which would be followed by general relief to the whole country, we do not know. But politics makes cowards of men. It cools the ardor of their blood and conjures up in their minds monster fears. It is a fellowship that many brave men enter, but few brave men survive.

It is this cowardice, however, that offers the best hope for amelioratory legislation. If there is one thing that Washington dreads above all others it is public opinion, public resentment, and the one thing it is sure to yield to is public pressure. Concerted action by business men in favor of a revision of the revenue law now, not after November, will bring about revision, and revision will hit at the basis of many of the gravest troubles now afflicting the country.

### A WISE POLICY FOR THE SHIPPING BOARD.

CHAIRMAN BENSON of the Shipping Board has summoned a conference of some of the leading business men and shippers in the country to meet in Washington April 15 to discuss the policies of the Board with the object of securing the most efficient possible use of the marine equipment now at the disposal of the nation.

There are two things which the Board is doing which commend themselves to all laymen. One is the establishment of shipping agencies in the principal ports of the world. We understand, for instance, that two of the best men in the employ of the Board have recently been sent to South America, one to Brazil and the other to the Argentine. The American marine can never thrive and can never become permanently successful until its interests in foreign ports are in the hands of competent Americans. When foreign and competing agencies have to be called on to serve American

ships it is only natural that the service given should not be of the same high character accorded to vessels of the same nationality as the agents. It is her facilities abroad, no less than her marine itself, which has put England in the commanding position which for so many years she has enjoyed on the oceans.

The other highly commendable program of the Shipping Board has been its policy of encouraging the establishment of new trade routes. Its plan of turning over ships for operation to companies developing the new routes is a good one, and the results so far achieved have been excellent.

But there is more than a possibility that all of the development accomplished may be negated and destroyed by the willingness of the Board to sell ships actively engaged in the trades mentioned. When a ship is allocated to such an operating company, the allocation should be more or less permanent. Certainly there should be no sale if other vessels are available.

It is no secret, for instance, that the Board has recently sold to foreigners ships now actively employed in the development of new trade routes—ships profitably employed and admirably suited to the trade. The Board states that it is its purpose in such cases to substitute for the withdrawn vessels others of a suitable type, but it is not clear that such substitutions can always be made.

Assuming that some old and established company, for instance, should wish to drive one of the new companies out of business, it would appear to be easy for it to buy from the Shipping Board the particular vessels employed by the new company. There can be no stability to a company which is constantly under the threat of having its ships taken away from it. It ought to have guarantees of permanency of possession, within proper limitations.

We are opposed to Government operation. There is something about it that destroys efficiency. The policy in effect since March 1, as formulated by the Shipping Board, recognizes this, and what is being brought about, in effect, is private operation. But it is just as important that the Government should "denationalize" the fleet under proper safeguards as it was to arrive at proper and wise principles in the return of the railroads. In other words, before selling all the ships to private companies, it wants to be sure that there are responsible private companies to which to sell them. By permitting the newer companies, therefore, to build up new routes and business under the equivalent of a charter system the Shipping Board would virtually be creating its own customers, preparing for legitimate sales to legitimate buyers under terms that would assure the permanence of the marine and the extension of national trade.

It is apparent, therefore, that a wise policy would assure the new companies some permanence of possession so far as the ships allocated to them are concerned, not only because that is a good program now, but also because it promises so much in the future.

The nation's fleets are the sentinels of tomorrow. They stand at the portals of the future, holding, to a considerable extent, the destinies of the country in their hands. They are the vehicles of international trade and their successful functioning will spell prosperity or disaster in the days of tense competition for world trade that are rapidly dawning. Never again will the nation be willing to repeat an expenditure of billions for the building of fleets. If the experiment which has been made proves a failure, it means our surrender of the seas. It is for this reason that it is so important that nothing be done at this time to handicap unduly or drive out of existence those aggregations of capital and enterprise which have patriotically looked to the seas for employment in the belief that they could rely, at least for a time, on the help and encouragement of the Government.

## AN INCOME TAX BILL OF 1864 VS. PRESENT INIQUITOUS METHODS.

THE MANUFACTURERS RECORD has received the following interesting form of an income tax bill rendered to a Marylander in 1864:

### UNITED STATES INTERNAL REVENUE.

Fifth District, State of Maryland.

August 27, 1866.

Div. No. 6.

Collector's Office, Ellicott's Mills,

Mr. ....  
Hookstown.

To THE UNITED STATES, Dr.  
(For Internal Revenue.)

Amount  
tax.

Tax on income for the year 1864, viz.:  
Income exceeding \$600 and not exceeding \$5000.  
Amount, \$4400, at 5 per cent. .... \$220.00  
Income exceeding \$5000. Amount, \$3182, at 10 per cent. .... 318.20  
Total ..... \$538.20  
Less tax withheld.....

\$538.20

Tax on the following articles for the year ending May 1, 1866:

	Rate.	Abstract No.	
Billiard tables, kept for private use, each....	\$10.00	261	
Carriages, valuation over \$50 and not over \$100, each.....	1.00	262	1.00
Carriages, valuation over \$100 and not over \$200, each.....	2.00	263	
Carriages, valuation over \$200 and not over \$300, each.....	3.00	264	3.00
Carriages, valuation over \$300 and not over \$500, each.....	6.00	265	
Carriages, valuation over \$500, each.....	10.00	266	
Pianofortes, etc., valuation over \$100 and not over \$300 each.....	2.00	267	
Pianofortes, etc., valuation over \$300 and not over \$400, each.....	4.00	268	
Pianofortes, etc., valuation over \$400, each.....	6.00	269	
Gold plate, kept for use, per ounce.....	.50	270	
Silver plate, kept for use, per ounce.....	.05	271	
Gold watches, kept for use, valuation not over \$100, each.....	1.00	272	
Gold watches, kept for use, valuation over \$100, each.....	2.00	273	2.00
Yachts .....			
Amount of tax.....			\$544.20
Penalty .....			
Total.....			\$544.20

Received payment,

GEO. W. SANDS,  
Collector.  
Per JOSEPH W. GAW.

Contrast the simplicity of this bill with the mind-destroying, profanity-provoking nightmare with which American citizens are now confronted in their income tax bills, and then pray for a return of the sanity which prevailed in Congress in these olden days.

## A Banker Who Believes in Forcing Bonds Out of Banks and Breaking Down Wages, in Which Manufacturers Record Does Not Agree.

National Bank of Summers.

Hinton, W. Va., April 2.

Editor Manufacturers Record:

I have read with a great deal of interest a circular-letter that you send me in reference as to what is best to do with our Government bonds. I am firmly of the opinion that the bonds should be forced out of the banks. The question of wages would soon settle themselves when this great inflation of currency is curtailed. Forty-eight cent money is very detrimental to the country, and it should by all means be withdrawn so as the country would settle back to a proper basis.

Our banks here have quite a number of bonds that are made use of over and over by borrowers, which has a tendency for the people to squander their money on such things as automobiles and nonsense waste. The sooner this is done, the sooner the country will recover.

JAMES T. MCCREERY.

P. S.—The Government will soon have to take over the bonds, anyway.



## France Is Right

THE French have paid too dearly in blood and treasure, in agonies of apprehension, to again sit idly reading while the assassin crawls nearer to stab her in the back.

There is little subtle about the German. His is a ponderous diplomacy. But what it lacks in nicety it more than makes up in sheer devilishness. The French alone understad him, alone are able to read his inner thoughts and purposes, alone are undecieved by the flabby reasoning of the Hun. They know him because they have cause to know him. They have been smitten on both cheeks, and while others may be content now once more to trust the great hypocrite of nations, France can never trust him. Therein lies the hope of the world.

The Ruhr district episode is merely the culmination of a long series of treaty infractions by Germany, indulgence in which was begun before the ink on her signature was dry. She is adept in making of treaties scraps of paper. She decided months ago that the Versailles document was a mere conglomeration of words, to be appealed to only to lend emphasis to the scorn with which she viewed it.

The long sessions at Versailles were intended to fix the terms of German punishment. But almost immediately the theory was advanced by President Wilson and others that it was not a treaty-making assemblage at all, but a council of the nations for the purpose of revolutionizing human government. The apostles of this theory made up in physical power what they lacked in argument. They heard voices in the air and they listened to them. Where the voices came from they did not know. There was no God in their Covenant.

What Clemenceau was fighting for all the time was the protection of France, and, therefore, the world, against Germany. He knew too much to believe that a spiritual regeneration of the German people had occurred. He knew that, if again powerful enough, the same old Germany would be hurling new forces of destruction against civilization. The armistice did not mean to Clemenceau—did not mean to France—that victory over the Hun had been won. He had been beaten to his knees, France knew, and could be kept there if there was enough iron left in civilization's veins to keep the faith and not surrender to the forces of sentimentalism.

Wringing a concession here and another there, Clemenceau nevertheless was finally compelled to renounce those military precautions which Foch and the military school advised. A Germany penitent in chains would be a safe Germany, and none other, but the United States insisted that it would be sufficient to tie a silken cord about the culprit's neck and label it the League of Nations.

But practical men of France were not deceived by that diplomatic character of idealism. "This group of words will keep the Hun from springing," said the statesmen to Clemenceau. "Very good," said the great Frenchman, "but make good your faith by agreeing to help us if he does spring." The envoys from Washington and London formally so agreed. Even more, they undertook to write into the Versailles document a statement of the contingencies which were to be interpreted as a Hun move against the peace of the world. One of those contingencies occurred when the Berlin troops moved into the Ruhr district.

There were immediately two courses presented to the nations, the one honorable and the other dishonorable. Millerand, in the Supreme Council at London, had been urged by the British Premier to adopt a policy of acquiescence and inaction. He replied by outlining guarantees from Germany which the safety of his own country would permit him to accept. Lloyd George curtly refused the suggestion. So, according to Pertinax, as he made his decision giving Foch a free hand, Millerand declared: "My choice lies between two kinds of embarrassment, inherent to the pursuit of a weak policy

on the one side while a firm policy has been followed on the other. I have decided that I will choose the policy of firmness."

To understand the situation in its fulness it is necessary to consider the propaganda against the French which has been issuing from London for many weeks. Early in the year British diplomacy had decided definitely on two programs. One was the trade penetration of Russia, operating at first through such border States as Esthonia, thereafter to be followed by a lifting of the blockade and some sort of recognition of the Soviet. The other was revision of the peace treaty, with the special object of softening its provisions and relieving Germany of many of the major penalties which the world had decided she deserved. Both programs were inimical to French interests. They were more than that, for they were both hostile to the best interests of the world and meant that the fruits of victory were being trifled with.

A month ago it was the conclusion of London that pressure of various sorts had won the French over. In London political clubs the epochal victory was believed to have been achieved when the French finally agreed to the trial of the German war criminals by German courts. That meant abandonment of the trials altogether, so far as justice was concerned. Friends of Lloyd George insisted that he had won a great victory and that French compliance thereafter in the entire program of revision would be a matter of course. Moreover, there was an understanding that propaganda would be begun in France to reconcile public opinion to the new propositions. Right there was the weak link in the chain, because certain patriotic journalists in France, instead of publishing the kind of propaganda desired, started a contrary propaganda for the safety of the nation and the reaction was favorable to them, as might have been anticipated.

Had the spectacular effort of the militarists to overturn the Ebert Government not been premature, it is entirely probable, nevertheless, that France would have been compelled to accept the revision program and even to have aided in putting Germany back on her feet. But that revolt, coupled with other information in the possession of the French Government, proved beyond all question that a German-Soviet conspiracy was under way, and that only by the exercise of extreme care could a sudden appearance of an organized Red army on the banks of the Rhine be prevented.

Nor is it to be doubted that the entire Ruhr disturbance was a planned coup, as is intimated in a dispatch from Rhenish Prussia to Vaterland, in which a correspondent asserts that "the Government forces were very careless during their advance into the Ruhr region, leaving much arms and ammunition lying along the roads." Why? The same correspondent reveals the reason when he says that the Red forces in the Ruhr district have hidden a large quantity of arms, "and are preparing a new revolution if the Bolsheviks succeed in crushing Poland and in occupying the German frontier."

No German believes the war has been lost. German eyes and German genius are in Moscow, and the magnificent human facilities of Russia are being looked to for filling again the gray ranks which civilization, at such a vast cost, decimated.

These are the things that Paris knows. She cannot pretend not to know them. There is safety in precaution and there is no safety in anything else.

It is complained that France sent colored troops into the occupied territory. We regret it. But not two generations have passed since the United States sent colored troops, emancipated slaves, into the South to exercise control over their former masters, and it hardly lies in the mouth of Washington

or of sophistical newspapers to lament an action of the part of France which both alike condoned and gloried in here at home half a century ago. It may be that the Hun, in his belligerency, gave evidences of a stricter code of honor than animated the Southern armies; it may be that his allegiance to high principles earned for him a right to be spared the occupation of his cities by some colored troops; but if that be true, then night has lost its blackness and Hell has turned into Heaven. Civilization, including the United States, was glad enough to have colored troops to fight against the Hun. Is it a crime to use them now to make the Hun live up to his commitments?

It is vainly contended that the insolence of the German in these days is due to the Senate's steady insistence on the continued independence of the United States. It is claimed that the Huns would not have violated the treaty had they known that American troops would be assigned aforetime to its vindication. Yet the facts are that the whole so-called liberal press of Europe has been howling for months that the League of Nations would permit Germany to violate the treaty, that the League would soften the provisions, that the League would help Germany out and that Germany could depend on the League to assure her rehabilitation.

The truth is that not the failure of the Senate to accept the League of Nations, but the League Covenant itself is responsible for all the trouble. It has been urging the Hun to insolence ever since it was conceived. He pictured it from the beginning as an instrumentality of avoidance. It stated principles which he could invoke to escape punishment. It pictured an era of compromise which would enable him to "get from under." It gave him a chance to drive wedges between the Allies, and he has been driving them with astounding success.

That League Covenant has kept the whole world in an uproar for months. It has aggravated indiscipline everywhere. It has incited rebellion and sedition and has lured men's minds from the pursuit of the real to the pursuit of the unreal. From the very beginning it led the guilty to believe that justice would not be meted out to them. A strong peace could have been written, the world expected it to be written, but the catalogue of reparations was loaded down with covenanting, and the whole world, including the Hun, was taught to believe that the great war had been but an incident, which ought to be forgotten, and that the only thing an armistice had been arranged for was to give an opportunity to formulate an idealistic program of super-government.

To those who think that the Senate's patriotic action is the reason for the Ruhr situation, it is sufficient to ask one question: What would our position be today if we were members of the League?

The effort to put Germany in the martyr's role is not merely a blunder; it is a monstrous crime. Shall men of heart so soon forget the sacrifices of France? Shall men of intelligence desert her because she has adopted alone a course in which her friends, by plighted pledge, should have been associated? This great conservatory measure, this action which will bring Germany to her senses and teach her to appreciate the enormity of her crimes, will yet entitle France to the gratitude of the world. It is her genius to glimpse the future clearly and to act accordingly. Hun troops in the Ruhr district in 1920 differ little in principle from Hun troops in Brussels in 1914. Each event made a treaty a scrap of paper.

It is not yet manifest what America will do. The Administration is still waiting for a clearer exposition of the facts. It is not certain, indeed, what the United States can do. She is not a member of the hybrid organization known as the League of Nations. But she is still at war with Germany, and how long has it been right for us to concern ourselves

with the fate of our enemies to the hurt of our friends? America is at war with Germany. That is a sufficient answer and a sure guide of the course to be followed. And if, indeed, we love France and are her true friend, now is the time to show it. If the sword is again in her hand it is because her heart is still exposed.

We said when the armistice was signed that it was the greatest mistake in all history. We said when the militarists seized Berlin a few weeks ago that the military man who ought to be in control of that city was Foch. The French, it is certain, have not gone far enough. They ought to go to Berlin and the Allies ought to go there with them. Germany is potentially today a pistol pointed at the brain of civilization. She may, through a Red alliance, at any time spring into action. She ought to be kept under guard. Then these fake Red uprisings would come to an end, as well as all the other plottings and machinations which are constantly disturbing the world and keeping its nerves on edge.

There will be no peace so long as the Germans are free to break it.

## ERRONEOUS IMPRESSIONS.

Scofield Engineering Co.

Philadelphia, March 31.

*Editor Manufacturers Record:*

Kindly refer to your Daily Bulletin of March 29, on the last page, under the heading of "Muleting the People Under Pretense of Muleting the Rich."

The first paragraph of this article is misleading, and is in line with the statement Secretary Houston was credited by the press of making, viz: that personal service corporations do not pay a tax.

The personal service corporations do pay a tax, not directly, but each and every stockholder must pay a tax on the earnings, whether they receive them or not. It is simply passing the tax from the corporation to the stockholders in the corporation, which, in the case of the personal service corporations, the majority must be giving their time and attention to the company, and capital is a minor consideration.

The brains of those forming the company are the main assets of a personal service corporation, and if they were taxed the same as a stock company, it would be equal to confiscating the majority of their earnings, as most personal service corporations have only a few thousand dollars in capital.

We call this to your attention, as we do not like for the false impression to get out that personal service corporations are tax exempt.

WM. G. RIVERS,

Secretary and Treasurer.

It is unfortunate if anybody construed the paragraph in question to mean that the earnings of personal service corporations are not taxed.

The point at issue was the contention of certain Treasury experts that the stock-dividend decision might mean that stockholders in personal service corporations would avoid all taxation whatever by the simple expedient of not dividing earnings. It was a contention which appeared to us to be forced and unwarranted, but it nevertheless served to emphasize one of the great faults of our present system of taxation, namely, the inability of any except experts to figure out the taxes and the necessity of constant appeals to the courts for interpretations of provisions.

Stockholders in personal service corporations not only pay taxes, but they are heavily mulcted. Indeed, Congress has seemed to be particularly hostile to those who make a living with their brains. A preceding revenue measure, for instance, actually levied a special and extraordinary impost on incomes earned as opposed to those unearned.

## England Expands Its Credit: We Contract Ours

A READER of the MANUFACTURERS RECORD who has recently had an exceptional opportunity of hearing at first hands the wonderful work that Great Britain is doing in expanding its world-wide business activities, with a view to the strengthening of its financial and commercial hold upon world trade, writes us:

"England is reaping a harvest that should come to America. For some reason credits are denied and frowned on by our Government, but England is financing and reaping tremendous profits from European trade, and England's financial condition, if this continues for a year, will be amazing to the world.

"England is using the depression in its exchange practically as a protective tariff wall. That country is making a terrific drive not only for regaining its business, but for gathering additional business. Commissions and representatives are being sent to every corner of the globe. They realize fully that they must be prepared to meet the enormous war expenses, and, most important of all, they are preparing to meet the commercial warfare with Germany and other sections of Europe.

"They are securing business that had been ours before the war.

"In England people are still buying war savings stamps. In America they are redeeming them as fast as possible, the difference being due to the fact that in England there has been no restriction of credit. On the other hand, they are encouraging expansion in every way possible. The curtailment of credits in America has resulted in restricting business. Holders of United States war savings stamps and bonds are having them redeemed or selling them. It is a calamity. If the present policy is continued until Germany re-enters the commercial world, with the stronghold that England is now securing the result will be disastrous to American commerce.

"We had the golden opportunity of becoming a world power, the greatest commercial nation ever recorded in history, but we have literally neglected it."

These facts should not create any surprise on the part of well-informed Americans. Long before the armistice was signed the British Government and the business men of the empire were laying their plans for recapturing their foreign trade, and not only doing that, but for vastly increasing their domination of international trade and finance. Every movement in Mesopotamia, in Persia, in South America, in Africa and elsewhere had in mind the definite plan of controlling the sources of raw materials and of making London more than ever before the center of world trade interests. Whether these trade activities be in oil in Persia or Mexico, in wool in the Argentines, or in coffee in Brazil, in sugar in Cuba, in leather all over the world, every sale or purchase made by or through Englishmen pays toll to London.

We talk glibly about driving England out of this or that market, but the long-headed Englishman, merchant or banker or shipowner laughs in his sleeve, tells us blandly that he is afraid of our rivalry, we are so smart and alert and have such great resources, and then he steps around the corner, sells a big bill of goods to Timbuctoo or Kamschatka or New York, it matters not which, or finances some great scheme for development in far away places, the names of which we have never even heard, and comes back and rejoins the conversation and the American comes home profoundly impressed with a belief in England's decadence and the certainty of our capturing its foreign trade.

We work for today, we think politically in terms of yesterday and tomorrow. The English think in terms of centuries past and to come, and look not to tomorrow merely, but to the centuries ahead to what England will be doing a thousand years from now, and English business men plan accordingly.

Let no American deceive himself. England is in the infancy of its development in wealth and commerce. Its "plant," if it may be so called, for doing international things in politics and in trade is as to ours as is the Steel Corporation to some wayside blacksmith shop. If we are to match England in seeing far ahead and capturing a fair share of world trade in competition with that mighty empire, we must train our men

in diplomacy, in economic studies looking to foreign trade, and think not so much of what we can achieve today or tomorrow, but of what foundation we can lay for the centuries to come.

Instead of narrow provincialism in banking, instead of curtailings credits, instead of petty little ideas and raising bugaboos with which to frighten business men, our bankers must have a world vision—and what a mighty change that would require in some of them! Our Federal Reserve Board must be the financial leader of the nation to broader work at home and abroad, instead of doing its utmost to discredit our national bonds and to make rabbits of those who would be lions in business if they had the same encouragement that England's great financial forces give to its business men.

What a contrast! England, which bore the brunt of financing the world war; which sent 7,000,000 men to battle; which swept the seven seas of hostile fleets and held in leash the German navy, now rushing forward in trade with unprecedented activity, sending its goods and its money and its credits to the far corners of the world, while America is hamstrung by the lack of credit and some bankers openly advocate the deflation of business in order to bring trade down to the dead level of easy credit handling where neither financial genius nor broad world vision are needed!

### A TREATY FOR WORLD WAR.

IN the course of a series of addresses on the proposed League of Nations, under the title "Treaty for World War or for World Peace," Rabbi Joseph Krauskopf of Philadelphia said:

"As events subsequently proved, President Wilson was no match for the past masters in the arts and crafts of diplomacy, Clemenceau and Lloyd George. In their eyes he was but an amateur in politics, little acquainted with the intricacies and intrigues of European affairs. It amused them to see him take himself seriously, to see him assume the role of world-arbiter, when they knew that he could not have his own way with even so small a part of the world as Mexico. Like professional gamblers, they allowed him to win a game or two at first, only to fleece him all the easier at the end.

"His ideals were high, but he lacked the practical knowledge to bring them into life and to compel the world's adoption of them. While he was theorizing and dreaming they were busy hatching out a treaty, the like of which the world had never known for cruelty, a treaty so unprecedentedly inhuman, so insanely vengeful, so cataclysmal, so calamitous to the people, of them that made it as well as to the people against whom it was made, that, were the execution of it possible, it would set the world-clock a thousand years back, would open an age so dark, brutal, poverty-stricken, as to make the one hitherto known as the Dark Ages appear white in comparison."

If President Wilson was not able to match his diplomacy against that of Europe, how would it be possible for some other representative from America to match in the League of Nations the diplomacy of eight other countries whose diplomats have inherited the diplomatic training of the centuries? If President Wilson fell down so completely in the diplomatic contest with Lloyd George, Clemenceau and others that he was to them but an amateur in politics whom they permitted to take himself seriously while, in effect, they played him as a sucker, what would be the outcome if we had joined the League of Nations and all the diplomacy of the world, had been staked against the diplomacy of one representative from the United States? The very ideal was from the beginning so ethereal, so wholly unwise from every possible point of view that the amazing thing has been that so many American people permitted themselves to be played for "suckers," and as the saying is, they swallowed "the hook, sinker, bait and line," and they are still dangling in the air, unable to get on solid ground. They are like a fish out of water. They are out of their element and they know not how to get back.



## INCREASED PRODUCTION TO BE THEME OF BUSINESS MEN'S CONVENTION.

**T**HE meeting of the Chamber of Commerce of the United States at Atlantic City April 26-29 will be devoted to "Increased Production."

There is no other business question comparable to it in importance. There is but one way in which the inflation of credits occasioned by the great war, and its borrowings from the future, can be made good, and that is by a corresponding inflation of business, which is another name for greater and greater production.

Every phase of business development as it may affect greater production will be considered in a large way at the meeting. The interrelation of the various modes of transportation and the effect on production; the place in the equation of agriculture, labor, taxation and finance will be considered.

Representatives of more than 1300 commercial and industrial bodies will participate in the deliberations of the convention, which will bring together whatever there is of genius, efficiency and skill in the industrial leadership of America. It will be a liberal education for any man to mingle with this selected group of Americans, hear what they have to say and get their points of view. Not only are these conventions inspirational, but the particular program mapped out for this year is filled with meat, and concrete suggestions of the very greatest value may be anticipated.

One of the special subjects on which the convention will lay emphasis is "The Government in Relation to Production," under which head will be considered taxation and the anti-trust laws. There is not a business man in the country, nor a single citizen, who is not unduly burdened by the taxation system now in vogue. The discussion of the subject at the Atlantic City convention, therefore, is certain to be of the very greatest value and would of itself repay attendance.

There is but one cure for the troubles of the world, and it is not found in legislative halls. Work and production constitute the only remedy in sight. It is to encourage and assure both that the Chamber of Commerce is dedicating its meeting this year.

It ought to be the most helpful and constructive convention the National Chamber has ever held.

## THE MOTOR TRUCK'S REMARKABLE DEVELOPMENT.

**T**HE present wide use of the auto truck is one of the most remarkable features of transportation development that the world has ever known. The auto truck has come into use to a greater or less extent in practically all countries, and it was a vital factor in the operations of the American and Allied armies during the war. In this country the auto truck has relieved congestion on the Atlantic seaboard at times when a breakdown in transportation facilities was dangerously near. Intercity service, covering stretches of hundreds of miles, has been established in many sections as a permanent feature. An interesting illustration of present tendencies was recently furnished by the fact that all the increase in transportation facilities shown for 1919 by the important manufacturing city of Fall River, Mass., was represented by added auto truck service. Shipments by rail and water remained stationary, but auto truck shipments moved up until they now equal the shipments by rail.

Some statistics compiled by the B. F. Goodrich Rubber Co. show that there were 953,093 trucks in use at the end of 1919, compared with approximately 700,000 in 1918. This was 37 per cent increase for trucks and was 16 per cent greater than the increase shown for passenger cars.

As shown by the reports, New York led all other States, having 94,716 trucks in use. Pennsylvania, Ohio, Illinois and California were a close second, with Illinois leading by a small margin, with 65,000. Nevada came last in the list, with only 700.

The fact that trucks showed a larger increase than passenger cars opens the way to some interesting surmising. If trucks continue to increase at the same rate in the future, there will be as many in use by 1926 as there are passenger cars at present. If both trucks and passenger cars continue to increase at the same rate, they will be the same in number by 1933.

Although the greatest increase in motor truck use was shown by commercial and manufacturing centers, farming districts also made large gains. A recent Government report showed there are now 49,195 trucks in use on farms, and that the number is steadily increasing.

## The Answer to This Is Sin Is the Cause of the World's Sickness, and the Great Physician Only Can Save Mankind.

Pascagoula, Miss., March 27.

*Editor Manufacturers Record:*

I have just been reading the MANUFACTURERS RECORD, as I always do, and some of the articles dealing with current events recall to mind the statement made by Galen, the ancient Greek physician: "If the stomach, in a particular case, is unable to exercise its peristaltic and grinding functions, how are we going to bring it back to normal if we do not know the cause of its disability? How on earth are the followers of Erasaistratus going to act, confessing as they do that they make no sort of investigation into the cause of disease? For the fruit of the inquiry into activities is that by knowing the causes of the dyscrasias one may bring them back to normal, since it is of no use for the purpose of treatment merely to know what the activity of each organ is." (The Natural Faculties. Bk. II, ix.)

The world is sick, and it is very sick, and around its bedside have gathered the most mighty physicians, consisting of "great editors," theologues and members of that class that Shakespeare calls the "scurvy politician." All kinds of remedies have been suggested—legislation dealing with moral regeneration of the world, XVIII Amendments, repeals of the XVIII Amendment, Volstead Act and the establishment of an international debating society to be called a League of Nations. Each one seeks to relieve the patient by suppressing the symptoms of the disease, but none of them seek to find out its cause and by removing it make it possible for nature to restore the patient to health. The "red-light district" is not the cause, but only a symptom of a disease of the body politic, and so it is with the liquor traffic.

The revolutionary outbreaks so common in various parts of the earth bear a close analogy to the buboes that appear on a patient suffering with the black death of bubonic plague, and indicate that the disease has reached an acute form, and that the patient is near death.

Gil Blas relates the story of a man who was very sick, and his servant called in two physicians of different schools of medicine, who arrived at the patient's bedside at the same time, and while the two men of medicine were quarreling about which of their respective schools of medicine were the best, the sick man died. Something like this is now evident at the bedside of the world; while the physicians are suggesting remedies for suppressing the symptoms of the disease, the patient's fever is rising, he is growing more and more nervous and delirium is setting in, while on the outside, like a pair of buzzards, the undertaker and lawyer are waiting for the feast.

As I am neither a theologue, nor a "great editor," nor a politician, I have not any remedy to offer, but would like to suggest that perhaps the world's physicians might take a useful hint from Galen—find out the cause of the disease of the body politic and by removing it give nature a chance.

CHAS. E. CHIDSEY.

## WHAT OF THE LABOR SITUATION? IS LABOR GROWING MORE OR LESS EFFICIENT?

ON March 22 the following letter was addressed by the editor of the MANUFACTURERS RECORD to a number of large employers of labor:

"We are in receipt of two letters, one from one of the most important construction companies in the country, stating that there is a decided increased efficiency on the part of labor as shown by their carefully kept records; and the other from one of the leading bankers of the country, in which, in criticizing labor, he says that the 'laboring men have not sense enough' to understand the importance of increased production as a means of solving some of our problems.

"I far prefer to take the view of the concern which shows increasing efficiency in labor rather than what I regard as an exceedingly unwise statement made by the banker in his criticism of labor.

"It is very important that the country know whether labor is becoming more efficient or less efficient. It was natural that there should be some slackness on the part of labor and some lessened production, due to the great strain under which the whole world had been living for five years. A reaction from that strain was natural, and should have been anticipated. My own opinion is that labor is adjusting itself to new conditions probably with as much rapidity as other classes of people. Certainly the records of savings banks, insurance companies and building and loan associations show that labor is saving a very large amount of money, notwithstanding the general impression to the contrary.

"I am anxious to present the views of some of the larger employers of labor on the whole situation. I shall, therefore, greatly appreciate a letter from you, brief or lengthy, as you may prefer, expressing your views as to whether labor is becoming more efficient or less so. And in discussing the matter I trust you will give your views on the whole labor situation and how production in the factory and by increased transportation can be brought about to the best advantage and most rapidly.

"I am asking a number of the larger employers of labor in the country for their views on the matter, believing that a symposium of this kind will be extremely helpful to the entire country.

"Hoping to have a favorable reply from you in a discussion of the situation, I am, etc."

From many men of high standing in the business world we have replies which are at such variance in some respects that it is quite impossible to dogmatize and say either that labor is growing more efficient or less effective. And yet there is running through these letters a distinctly hopeful tone that labor is certainly not becoming less efficient, which in itself is a good sign, while others are very pronounced in the belief that the period of inefficiency and extravagance, due largely to war conditions, is passing away and that labor is showing pronounced signs of increased efficiency.

One very interesting expression from a railroad man, who is known as one of the most careful students of business and economic conditions in the country, is contained in a personal letter discussing the subject, from which we quote the following:

"While my feeling is that there has not been much increased efficiency, except in spots, I think there is warrant for the expectation of improvement, and I deplore such expressions as that of the banker to which you refer. Laboring men, as well as bankers, are not immune to wrong ideas, and are frequently misguided, but they have just as much sense to understand the importance of increased production as other classes of the community, and perhaps have some advantages in this regard. Existing conditions are never so important as the conditions that are to exist in the times ahead of us. What we need is forward looking, with constant and unremitting effort to correct by intelligent means existing errors. I am confident we are passing through a cleansing and health-improving period. I believe that people are seeking in increasing numbers to attain the real purposes of life by endeavoring better to promote the general welfare and by modifying selfish individual aspirations. This belief gives me confidence in the future."

Another phase of the situation is discussed by a leading cotton-mill man whose own employes are showing greatly increased efficiency, but who notes with much concern the lack of interest and of efficiency on the part of day laborers and of

some lines of mechanical workers. In a personal letter, after referring to the fact that he had written his views in regard to the labor conditions in his own mill, he added the following:

"As a postscript, however, and to answer fairly the questions that you ask as to my views of labor conditions in general, I beg to say that in the building trades and other outside work in our section of country there has certainly been a let-up of individual effort, and I have never seen anything like the indifference and worthlessness manifested on the part of day laborers as well as in some of the trades, such as carpenters, bricklayers, plumbers, and the like. It is true that they are getting very much higher wages for less hours of work, and this of itself would perhaps account for their seeming prosperity, but the quality of workmanship and the standard of efficiency in these particular lines is indeed discouraging, and I am sorry to say that construction work of all kinds is suffering very materially on this account. The housing problem is a very serious one, not only in our community, but in practically every city of any size in the country, and, in my opinion, progress is not being made anything like as fast as it ought to be to overcome and relieve this trouble, and the general public will continue to suffer as a result until something can be done to overcome it. In fact, the working people themselves are suffering more than they realize, because it not only means higher cost for home construction and higher rentals, but unless the rate of construction can be increased it seems to me that the problem will become very severe before another winter comes on. It is my candid judgment that the shorter hours and increased wages have not brought the blessing to this class of workmen that they expected to get from it. I believe that the let-up of individual effort, the utter disregard of personal integrity to do an honest day's work and the spirit of trying to give as little in return for what they get as they can will deprive them of genuine happiness and contentment so long as this condition exists, and there is more truth than poetry in the oft-repeated saying that the remedy for existing conditions is in the direction of hard work and increased production."

A few large employers of labor, including some railroad officials, have felt that it was not wise for them to discuss the subject in view of the agitation which is now under way in many parts of the country in regard to labor wages and the hours of service.

On the whole, the symposium is one of extreme interest.

The MANUFACTURERS RECORD is not unmindful of all of the pressing conditions connected with the apparently endless strikes of the hour. It does not at all minimize the difficulties of finding sufficient laborers to do the work that needs to be done and especially of finding men who work from the love of work and because they believe that work is a duty as well as a privilege. Despite all of these conditions, however, we believe that there are many popular signs of a tendency towards better things in the labor world. We believe that many honest-hearted laboring men, misled by the conditions prevailing during the war and by radical labor agitators, are now beginning to see the truth and are settling down to steady, regular work. We believe they are turning from the extravagance which marked the high pay during the war and are beginning to save money and to vie in thrift with the business men and the bankers who are so persistently demanding that the country shall economize.

There are many reasons why the profiteering created by the Government during the war effected the morale of all laboring people. They were taught by the Government to demand an ever-increasing wage, regardless of the amount of work that was done. They were taught to believe, by governmental action, that there was practically no limit to the amount of money that could be paid for inefficiency.

For all of this false teaching the Government and not the laboring men themselves are to blame. The Government permitted unscrupulous labor leaders largely to dictate the policy of the nation in connection with labor questions. We sent



5,000,000 soldiers into war at the rate of pay of about a dollar a day, with a little increase for those who went abroad. And we forced them to work 10 to 12 to 15 hours or more a day, according to the strenuousness of the contest; but we permitted about 2,000,000 laboring men to go on strike during the war, though they were drawing anywhere from five to ten times as much pay as the soldiers and were working anywhere from seven to eight or nine hours a day. We forced the soldiers into the battle, but we coddled the labor interests and todied to them.

Upon those in authority at Washington who brought about this condition rests the responsibility of inefficient labor and of slackened production. No one should have been surprised that labor became inefficient when it was taught by the Government that inefficiency was as profitable as efficiency and when the Government placed a premium upon slackerism on the part of labor. The laboring men should not be blamed for following the Government's instructions, and to berate laboring men as a class for the lessened production which was so long in evidence is foolish in the extreme. The Government was the cause, and the Government is the one that should be berated for its misleading tactics.

On the other hand, the laboring people are, we believe, getting over that period of intoxication and are settling down to regularity of work with just as much faithfulness and energy as are millions of clerks and others upon whom the responsibility to work is just as great as it is upon the laboring men. Wealth does not lessen a man's responsibility in this hour of world need to work to the extent of his ability. The man who has wealth to his credit has a greater responsibility resting upon him than the day laborer or the mechanic, for he has the added responsibility of enlarged opportunity and a larger

vision of the world's needs. No man who is not concentrating the whole energy of his life on work of some useful kind has any right whatever to berate the day laborer or the mechanic for laziness or thriftlessness. Work is the supreme duty of the world at the present time, for except by increased production there can be no salvation for the world out of the difficulties which it faces. The greater the wealth, the higher the position of the individual man, the greater is his responsibility to work.

We don't believe that laboring men can be driven to increased efficiency by denunciation. They must be met on the basis of equality of thought and of study, and the employer must come in direct personal touch with them and show by his work that he is leading them and not trying to drive them to a larger output.

With this spirit developed throughout the country, with the broad teaching of the meaning of work for the benefit of the individual and of the world, we are looking forward to better conditions to growing efficiency on the part of the people everywhere, of every class, and we trust that the time may come, however distant it may now seem, when the hundreds of thousands of idle, lazy, loafing boys and young men hanging around the street corners and in front of the moving picture and pool parlors of the country will by some manner of means be made to work. They are cumberers of the ground. They are a curse to themselves and to the nation. And until civilization can reach them and put them to work we shall have failed to do our duty to these idle, loafing men and to a world hungry for increased food and increased output of almost every line of industry. We commend to our readers the views expressed by many of the leading men of the country which we are publishing in the following pages.

### Management Must Meet Problems With Same Advanced Thought that Is Expected of Laborers.

Dodge Manufacturing Co.

Mishawaka, Ind., April 7.

Editor *Manufacturers Record*:

In answer to your letter of March 22, it has been our observation that in organizations where there is a fair and square relationship between management and workers there has been a reasonable appreciation of the value of increasing efficiency and sticking to the job, with the possible exception that in the trades employing what is known as common labor there is a growing disposition to shift jobs and rove from place to place.

This is part of the unrest that has arisen through post-war conditions as against the period when such labor received a higher reward, due to the emergency, than they were previously accustomed to. As such opportunities for unusual return decrease, the tendency to seek higher-paying substitute day-labor jobs increases. Wholesale condemnation of the attitude of such workers is no doubt due to the disturbance arising from a comparatively few prominent flagrant instances.

The stoppage in immigration and the return, through sentiment and otherwise, of foreign laborers has created a shortage in that field, and where that situation runs parallel to certain organized labor restrictions, particularly in closed-shop operations, there has been an undoubted decrease in production efficiency that could give rise to such complaints as you report.

On the other hand, management has its problems, which must be met by exercise of the same advanced thought that is frequently expected of laborers whose power of thought is less competent and active.

One great factor in the present situation, to our minds—and the solution of this difficulty rests wholly with management and the financiers—is the stabilization of the labor demand in the individual industry by the provision of steady year-round jobs. Make the jobs steady ones, and there will be less disposition on the part of labor to rove. While common labor as at present is scarce, it will shift to the point of greatest demand as those

conditions arise throughout the year, because such jobs mean higher hourly or daily rates of pay. By obtaining in this way the highest rate of pay while working, the loss of time is best offset. Workers cannot afford, and naturally seek to avoid, or at least offset, the loss of wages due to fluctuating production in those employments which are unstable because of seasonal business changes or incompetent management.

One practice, fortunately not known in our economic history and deserving of the most bitter condemnation, is that of the arbitrary cutting off of production by the management, either with a view to creating the impression of shortage of the particular commodity, with resultant outrageous prices, or with a view to bringing about an unnecessary reduction in wage scales on the ground that production costs are so high that competition cannot be met. Small wonder in such instances that labor takes the only course open to it of moving elsewhere rather than to be thus treated by the management.

Management in production and in merchandise distribution and financing may do much to avert the low spots in employment, and we must "have sense enough," as we expect labor to have in their way, to meet this situation and make more popular the steady, year-round job at good average wages.

Stoppage due to poor management, delays in transportation, season uncertainties in commodities, absence of "reservoir" principles in production, warehousing distribution and transportation and other factors all contribute to this roving tendency of common labor, and require thought and the recognition of responsibility by executives, bankers and producers in all lines.

The buck cannot be continually passed to laborers as though they were the only ones to "think" and perform. Management has just as much of an excuse for a temporary "letting down" as labor, and has no doubt relaxed somewhat from the nerve-racking performances of the war period, with the result that a restoration of business conditions to pre-war activities has been somewhat slow. This, coupled with the need for developing new principles in production engineering to offset the labor shortage, both skilled and unskilled, increases the complexity of the problem and adds to our impatience and fear for the future.

It is not apparent that labor is any less efficient as a class than is management, and there seems to be good alibis in both instances, but we do not improve matters by challenging each

other; we will gain much ground by a thorough analysis of the underlying conditions and exerting every effort to improve the mental and physical fundamentals that lead to our present distress and discomfiture.

M. W. MIX, President.

### "Do Unto Others as You Would That They Do Unto You."

A. B. Farquhar Company, Ltd.

York, Pa., March 30.

#### Editor Manufacturers Record:

You rightly say in your letter to me of March 24: "It is very important that the country know whether labor is becoming more efficient or less efficient." Any reply must necessarily be limited to personal observation and such information as may be had by careful reading and an exchange of views with other business men.

In the first place, while it is true that direct hand or machine labor produces tangible goods, I hardly think the question of production should be confined to labor so-called alone, since all members of society are, or should be, in one form or another and in their different spheres, producers. As Carlyle remarked, "We must work for our living or steal it."

Are our people as a whole soberly and thoughtfully recognizing the need of increased production and translating their thought into action by increasing their efficiency, or are they not? Personally, I do not think, from my own observation and experience, that they are, although I rather think we may be near the turning point toward a better and more wholesome attitude. That there are a majority of intelligent, conscientious, hard-working and thrifty citizens—the saving strength of the nation—goes without saying, and to this class, perhaps, there are steady though slow accretions. It is these workers who more rapidly recover from the natural reaction and slackness following the strain of the war, and I do not doubt that most of them are trying to do their duty.

But one has only to note, in a manufacturing city such as that in which I live, the crowds of boys, young, middle-aged and older men, standing on the street corners and coming out of the matinees and picture shows almost any afternoon of the week, to be puzzled as to how they find the time and to be doubtful of any burning desire to be profitably occupied.

It is idle to inveigh against labor or any other class. A general disposition seems to pervade all sections of society to work less and consume more, overlooking the fact that what is consumed must first be produced, and that any prolonged following of such a course must inevitably result in all having less.

While the discussion as to causes and remedies reaches a small section of our people and has a good effect, I fear that amongst the general run of workers a real and abiding desire for increased efficiency will only come when jobs are not to be had for the asking, and when to have and to hold again depends upon the ability to make good and produce or be fired. The workers must come to realize that if they don't want the time to come when they are hunting the job instead of the job hunting them, they have got to produce more and consume less—in other words, increase efficiency and practice economy. Producing and saving on the part of all is of paramount importance at this juncture.

All this does not mean that I have a low opinion of workers in general; merely that the only way of reaching a great number is by the hard, stern logic of facts. The facts now are that jobs are plentiful, wages high and men scarce, which condition may have to be reversed before there is a general acceptance of the need of increased effort.

In the meantime, there should be, as between employer and employed, a constant endeavor to arrive at mutual trust, understanding and co-operation. The employee should recognize that his employer is also a worker, usually a hard worker, whose business it is to provide employment and pay wages. Labor and capital are interdependent, and should work in harmony, and I doubt not that out of all the welter of unrest and conflict now so prevalent a better order will eventually emerge. I am confident that education and experience will teach the workers, organized and unorganized, as well as the employers, that economic welfare can only come to each through good-will as expressed in the Golden Rule—"Do unto others as you would that they should do to you."

A. B. FARQUHAR.

### Believes the Common Sense of American People Will Save the Labor Situation.

Fuller E. Callaway.

Lagrange, Ga., March 26.

#### Editor Manufacturers Record:

Your favor of the 24th inst. to Mr. Fuller E. Callaway is received in his absence on a business trip East. As he will be moving so actively, we are not attempting to forward any mail to him. He expects to return home around April 5 or 6.

From expressions of Mr. Callaway's, however, which we have read and heard, we believe that he takes a generally hopeful view of the situation, trusting in the average common sense of our people to finally save us.

Optimistic by nature, Mr. Callaway is, as he expresses it, "bullish on the United States." Broadly democratic in principle, he trusts the average sense of justice, fair play and common sense of a working majority of our people.

Mr. Callaway believes that it is not best for the country for any one class or interest to hold an undue power. He does not want us to be dominated by either capital or labor. A long time back, when there began to be increasingly evident the growing tendency of organized labor to usurp undue power and misuse it without regard to the rights of others, Mr. Callaway predicted that this would receive a check just as did the capitalists some 20 years back.

Having demonstrated in his own career the wonderful opportunities afforded under our American institutions to those who are willing to earn their way by industry, usefulness, thrift and fidelity, Mr. Callaway is strongly against anything that tends to limit the opportunities of the ambitious man or woman. He is opposed to autocracy, whether it be of capital or of labor, and wants to see a continuance of the greatest possible encouragement to individual initiative.

A very fine spirit of unity and accord prevails among all the workers in Mr. Callaway's organization. The labor turnover is small and the average efficiency most satisfactory. This is because, in addition to paying top wages, our companies do everything possible to make the working and living conditions pleasant and healthful, and by means of an excellent plan of profit-sharing each worker is made to feel a direct interest in the results.

J. A. PERRY.

### Believes We Are Making Decided Progress in Right Direction.

Parkhill Manufacturing Co.

Fitchburg, Mass., March 26.

#### Editor Manufacturers Record:

When you consider the strain under which the laboring people were placed during the war and the complete demoralization of policies and methods of employment and rates of compensation and the rose-colored altruistic propositions that have issued from high places, together with promise of reductions in the cost of living, by legislation, and the suggestions of immediate results to come from conferences and commissions, I think the recovery in morale and efficiency is quite remarkable.

I believe firmly that the laboring people are beginning to understand the importance of increased production, and that many of them see their opportunity to earn and save, as the records of the savings banks, insurance companies and building and loan associations to which you refer prove conclusively.

We expect, the high prices for labor and products to continue for some time to come, and that there will be more or less trouble in further adjustments, but I am sure we are making decided advances in the right direction.

Our records show a decided increase in efficiency and improvements in mental poise.

ARTHUR H. LOWE.

### 25 Per Cent Less Efficient.

The Matthew Addy Company.

Cincinnati, O., March 25.

#### Editor Manufacturers Record:

Our own experience at all of our plants is that labor at the present time is not within 25 per cent as efficient as it was before the war.

JAMES A. GREEN.

## A Marked Increase in Efficiency in Last Six Months.

Kirby Lumber Co.

Houston, Tex., March 27.

*Editor Manufacturers Record:*

In our industry, the manufacture of lumber, there has been a marked increase in the efficiency on the part of labor in the past six months.

Labor in the lumber industry in the South is unorganized, and it is not directed or influenced by traveling agitators and is not responsible to any distant power.

If organized labor has not returned to its pre-war efficiency, which seems to be very generally conceded, it arises, in my judgment, largely out of the circumstance that in the war period a government of laws under a written constitution was abandoned for an autocracy set up under the direction of the President, in which new arrangement organized labor occupied a peculiar and influential position. This created in the minds of men a new attitude toward Government and gave them a taste of the exercise of a new power which, in their thought, would enable Government to maintain them in reasonable affluence and comfort without any particular exertion on their part.

Organized labor, both in its leadership and in the rank and file of its membership, became so obsessed with this thought that they seem not to have as yet come to understand that the autocratic regime is passed, and that we are gradually setting in motion the orderly processes of production and distribution under a government of laws maintained under a written constitution.

Trades-unionism is one thing and domination of the Government by a privileged class is quite another thing. The domination which the American Federation of Labor seeks will lead to industrial decay, and until those who are directing the activities of that organization come to know that in our free country "equal opportunity for all and special privilege to none" is to be maintained, then we can hardly expect any very great improvement in the efficiency of the labor directed or controlled by that organization.

JNO. H. KIRBY.

## Marked Improvement in Efficiency and Loyalty on Southern Pacific Railroad.

Southern Pacific Company, Executive Committee.

New York, March 26.

*Editor Manufacturers Record:*

I find on inquiry from the officers on our lines, on which some 60,000 or 70,000 men are employed, that a marked change for the better is evident in the attitude of labor. A slight change was first noticed a month or two before the return of the roads to their owners; this was followed by a material increase in the efficiency of the employees in all departments, a rough estimate placing it probably midway between the greatest inefficiency during the war period and efficiency prior to the war. The situation is distinctly encouraging. We believe that this improvement, principally attributable to the termination of uncertainty as to the future of the railroads and their employees, will continue, and with minds relieved from anxiety and with assured fair treatment from the managements of the roads we expect a feeling of loyalty to the interests of the employer will be restored to an extent sufficient to materially increase transportation facilities, in so far as they can be increased by individual effort, pending the inevitable large expenditures which must await the restoration of railroad credit by appropriate action of the Interstate Commerce Commission.

J. KRUTTSCHNITT, Chairman.

## A Wholesome Sign of Improvement.

Judson Mills.

Greenville, S. C., March 29.

*Editor Manufacturers Record:*

I should not say that labor has adjusted itself to the new conditions rapidly, but it is certainly true that noticeable progress is being made in this direction. Notwithstanding the high cost of living, it was not an easy thing for labor to adjust itself to the new wages. In my judgment, higher wages at first represented money to be spent. There has been a reaction, and there is now a tendency on the part of labor to save. This makes for both character and efficiency, and is one of the wholesome signs on the horizon.

B. E. GEER, President.

## One Plant Where Co-operation and Good Spirit Has Brought About Constant Increase in Efficiency.

The American Rolling Mill Co.

Middletown, O., April 1.

*Editor Manufacturers Record:*

Mr. Verity will not return to Middletown for some time, and I am consequently answering the letter which you addressed to him.

Our local conditions will hardly serve as a fair basis of comparison of the attitude and conduct of laboring men throughout the country. We have worked without interruption for such a long time that we only know of disturbance by hearsay. During 1919, for instance, our plant operated continuously, losing no time at all except one day at each of the three holidays.

It seems to us that whenever men understand each other and work together toward a reasonable goal that stability and prosperity are bound to result, if they exercise ordinary foresight and caution. It has been our opinion for years that the vast majority of disputes have been caused by misunderstanding, which, in turn, is the result of failure on the part of numerous industrial establishments to provide proper means of personal contact between those whose function it is to manage and those who do not have managerial responsibilities.

We have always tried to prove by our actions that it was unnecessary for men to secure the assistance of outside interests in order to get a square deal and in order that their interests might be best protected.

It is true that the individual effectiveness of the organization has increased during the past six months. Neither this fact nor the morale of our organization seems to depend upon the "spirit of the times," but is probably the result of a definite program of improvement in which all Armco men have co-operated.

CHARLES R. HOOK.

Vice-President and Assistant General Manager.

## Will Recover from the "Morning Headaches" and Return to Normal Conditions.

Christian Girl.

Cleveland, O., March 31.

*Editor Manufacturers Record:*

I do not agree with the banker who says the "laboring men have not sense enough" to understand the importance of increased production.

The return to normal conditions in industry must be an evolution. There are two ways in which prices may return to a more normal basis; first, by decreased consumption, or by increased production; probably both are desirable. Labor is beginning to understand this, and evolution of time will bring it about, and, I believe, without any real serious consequences. Industry has passed through trying periods before, and will do so again. The present industrial situation may be likened to "the morning after." While I have no personal experience, I am told the morning after is usually accompanied by a headache. Consumption in this country has been on a spree, and we must expect the headache that follows. However, they are not usually fatal.

CHRISTIAN GIRL.

## Increased Efficiency Since Failure of Steel Strike, and Increased Efficiency in Transportation Since Return to Private Ownership.

Youngstown, O., March 29.

*Editor Manufacturers Record:*

I have gone over this matter with our people, and have also talked with other large employers of labor. The consensus of opinion seems to be that the efficiency of labor has made a decided increase since the failure of the steel strike.

I also note the increased efficiency on the part of the railroads, even considering the short time in which the inefficient Government control has been dispensed with. This has helped out the situation very much.

The high wages demanded by painters, bricklayers and other artisans of that class will undoubtedly make a very severe restriction on the matter of building.

J. G. BUTLER, JR.



# Men Cannot, Mr. Armour Says, Produce as Much in Eight Hours as in Ten.

Chicago, March 21.

*Editor Manufacturers Record:*

The question propounded in your letter of March 23 is one of those troublesome ones to which one can answer both "Yes" and "No."

Without question, labor is not as efficient or productive today as it was before the war, and yet there is reason to believe the tide is turning. In times when there is an abundance of labor, workers are more efficient, due to the fact that individual efficiency assures employment in the face of competition for the job. The shortage of labor occasioned by the war removed this stimulus.

Then, too, a great many new workers came into industry as a result of the war, and not all of them are as fit or as efficient as the average pre-war worker.

As the war progressed and the demand for labor increased, efficiency gradually diminished, and this lessened efficiency is one of the most potent reasons for what we call the high cost of living. Production per capita is the all-important factor in the cost of living, and as hours of work were shortened, efficiency lessened and wages increased, the price of commodities necessarily went up. I have no desire to complain about reduced hours or increased wages, but I am keenly desirous that people should recognize their effect on the cost of living.

I believe that the true relation between per capita production and the cost of living is becoming apparent, and that workers everywhere are turning in the right direction—increasing their output. In our business we have certain figures which are in the nature of a barometer, showing the degree of efficiency we attain in the matter of production. These figures for the past several years show how production costs increased during the war, and how, following the armistice, they began declining. These costs reflect wage and overhead increases and mechanical improvements, as well as labor efficiency, but our operating officials feel that increasing efficiency is discernible in the general results.

Our operating executives hopefully look forward to further increase in efficiency. There is no reason to hope for a per capita production equal to the pre-war standard, because men cannot turn out as much work in eight hours as they can in ten, and as soon as we get over the idea that they can the better it will be for us all. Men can, however, turn out as much work per hour as they did before the war, and that is the goal toward which we are looking now, and when it is achieved in all industry the cost of living should be materially lessened, even though it will still be higher than it was before Germany went mad.

J. OGDEN ARMOUR.

# Skilled Labor Efficient, Common Labor and Many Members of Building Trades Show Deterioration.

The Goodyear Tire & Rubber Co.

Akron, Ohio, April 8.

*Editor Manufacturers Record:*

The general impression I get from contact with labor in Akron with our work is that the piece workers and skilled factory operators are maintaining the same efficiency as before the war, and in some instances increasing it. On the other hand, I have best evidence that common outdoor labor and many members of the building trades are not as efficient as before.

The shortage of labor in these classes has had a tendency to make them more indifferent than previously to producing a full day's work on the average, although in many particular instances this is not true.

The unrest throughout the country, owing to the steadily unsettled condition of wages, high rents and commodity prices, and publicity given to profiteering, has had a general tendency to make the laboring man spend more time in trying to keep pace with the situation, and more or less indifference to his duty of production and co-operation, which are necessary for a permanent solution of the present unsettled conditions.

P. W. LITCHFIELD,  
Vice-President and Factory Manager.

# Believes Labor Is Adjusting Itself to Changed Conditions as Rapidly as Any Other Class.

The Virginian Railway Co.

Norfolk, Va., March 26.

*Editor Manufacturers Record:*

My observation has been that with the shutting down of war activities and industries connected with furnishing war material a large amount of labor has been returned to commercial channels, which has had the effect of considerably increasing the efficiency of labor employed.

During and immediately subsequent to the war there were two or three positions seeking men, and now we find two men seeking the position, which is having the effect of making the labor already employed appreciate their work and in consequence give greater efficiency than when positions were going begging.

I would say that the laboring man is not the only one who has not sufficient foresight to see the necessity of increasing production. I regret to say that our Government is the greatest offender. The Adamson law was the first to fail to grasp this important fact, and it has been strongly augmented by subsequent laws and action that has curtailed the production 25 per cent at a time when it should have been increased 50 per cent because of the demand made on us by foreign countries.

I believe that labor is adjusting itself to the changed conditions of the business of the country, as much so as any other class, and it will take time to work out a proper adjustment of this situation, and it will possibly require a general shaking down in all lines to accomplish it, but my faith in the American people leads me to believe that it will come about, and that we will eventually get our feet on the ground on a sound basis, as it was before we entered the war.

C. H. HIX, President.

# Gratifying Increase in Efficiency, But Still Below Pre-War Conditions.

Illinois Central Railroad Co.,

Chicago, Ill., April 5.

*Editor Manufacturers Record:*

More than 16 per cent of all Illinois Central employees were in military service, and the demand incident to requirements of war industries and other more lucrative activities created an excessive labor turnover, resulting in employment of those of less experience and ability. Since the armistice, however, a large number of our former employees have returned to the service, and I am very glad to be able to say that, as compared with a year ago, the increase in efficiency is quite gratifying. I would not, however, be understood as saying that our employees are, on the whole, as efficient as before control of the property was taken over by the Government.

The extent to which employees formerly unorganized have been taken into the unions, followed by elimination of piece work, shortening of hours, and application of union rules generally has had a very serious effect on labor output. I think, however, all will agree that labor matters in general will henceforth call for different treatment than has previously prevailed, and about all I can say as to this is that the Illinois Central organization is approaching the problem from a practical standpoint and in the effort to promote such relationship with its employees as will, under all the circumstances, produce the best results.

C. H. MARKHAM, President.

# Possibly We Have Reached the Turning Point.

DeBardeleben Coal Co., Inc.

Birmingham, Ala., April 2.

*Editor Manufacturers Record:*

Generally speaking, my observations are that there is very little, if any, improvement in efficiency of labor with which I come in contact. It is most gratifying, however, to be able to say there is no further decrease in efficiency apparent, and I sincerely trust we have reached the turning point and from now on we will notice a greater increase in efficiency.

HENRY T. DEBARDELEBEN, President.

## A Strong Presentation of Good Work by Efficient Mechanics.

Link-Belt Company.

Chicago, Ill., March 30.

*Editor Manufacturers Record:*

I am glad to testify that so far as the mechanics in the employ of the Link-Belt Company are concerned, the output per man is substantially what it was before we entered the war. In fact, at our Chicago plant the output per man, expressed in pounds per man, including the entire shop organization, direct labor, indirect labor and supervisory force, was somewhat larger in 1919 than it was in 1916. As expressed in pounds per productive hour, which is the test by which we determine the efficiency of our men actually engaged in productive work, 1919 showed an improvement of almost 30 per cent over 1916. Of course, we employ the piece and bonus system very largely in our shops, and our men are therefore paid on a productive or output basis; but I must say that beyond the difficulty of securing men, the Link-Belt Company has no fault to find with the output of its experienced mechanics. Where we do suffer is in certain of our departments that have undergone a material expansion, and that have, therefore, required the training of a considerable number of new men. This is particularly true of our malleable iron department in Indianapolis, where the average output of our experienced molders has not dropped off, but where the average output of the foundry, by reason of the large increase of inexperienced help, has suffered somewhat. We have instituted a training school to overcome this reduction in output, because we appreciate that this reduction does not reflect the mental attitude of the men toward work, but indicates only a lack of experience that proper managerial action can assist in quickly improving.

During my connection with the Emergency Fleet Corporation, from November, 1917, to May, 1919, frequent charges were made, particularly during the earlier period, that the men in the shipyards were not doing their best in the matter of production. This, too, was almost wholly a matter of inexperience, because the 50,000 trained workers that existed in the shipyards in August, 1917, were diluted by the addition of some 330,000 new men, drawn from all kinds of occupations, many of them in no wise related to the work assigned to the men in the yards. A gradual improvement month by month was manifested in the output per man, showing the result of increased experience, and when I visited some of the Pacific Coast yards, in November of 1919, very gratifying reductions, amounting in some cases to 30 per cent, had been shown in the labor cost of vessels.

I am not prepared to acquit all labor of the charge of slacking, because in some cases, like those reported in the clothing industry and the building trades, under unwise leadership, there was, as a necessary accompaniment of the general unrest, a very decided reduction in productive effort. I believe, however, that under wise management a return, even in these industries, to former output can in time be secured, and that the question of reduced output will again become a mark of inefficient management, rather than an excuse for failure on the part of the management to secure results.

I have repeatedly expressed myself to the effect that in the last 10 years the sales and distribution problems have been over-emphasized, and that the problems of production have become secondary in importance, so far as the chief executives of many of the industries are concerned. The supremacy of Mr. Ford in the automobile industry has been due to efficiency in production methods, rather than to cleverness in sales methods. A good product at a low price simplifies the sales problem vastly, and the only suggestion I have to offer to secure increased production in the factory is that executives keep their eyes on the shop.

CHARLES PIEZ, President.

## A Pronounced Tendency to Lessened Days of Work.

Harmony Mills.

Boston, March 29.

*Editor Manufacturers Record:*

I can best answer your letter of March 24 by giving you the results of a confidential investigation that has recently been made by about 30 textile mills in various sections of the country, which

shows that the reduction of output per employee per week since 1914 averages 15 per cent. Hours of labor have been reduced 11 3/4 per cent. The remaining 3 1/4 per cent is due to inefficiency and irregular working of employees. Some of the mills reporting state that their output has been reduced as much as 30 per cent.

In 1914 the weekly schedule of these mills ranged from 54 to 63 hours per week. At the present time they range from 47 to 55. The tendency of operatives to work only four or five days a week is noticed in all sections of the country, and because of a general shortage of labor the places of people who stay out one or more days a week cannot be filled, as in former years.

I do not credit some of the wild reports that we hear of extravagance, but believe that most of the better class at least of our employees are making substantial savings of the wages they now receive, which they ought to be able to do, as wages in textile industry have increased 138 per cent since 1915, and investigations made recently in several textile centers by the National Industrial Conference Board shows that the cost of living has advanced from 90 per cent to 92 per cent. These figures are also confirmed by the Bureau of Statistics of the Department of Labor.

ALBERT GREENE DUNCAN, Treasurer.

## Human Sympathy Toward Men Must Be the Basis for Better Relations Between Employer and Employee.

J. H. Williams & Co.

Superior Drop Forgings and Drop-forged Tools.

Brooklyn, N. Y., March 27.

*Editor Manufacturers Record:*

I join with you in deprecating the witless remark which you quote as having been made publicly by one of the leading bankers of the country in respect to the present efficiency of labor, and I cannot but feel that there has been a great deal of foundation these past few years for the pessimism, even if not for the indiscretion, of the banker quoted. We are much gratified to notice a number of exceptions to what would otherwise seem to be this rule, and we believe conditions are rapidly getting better in this respect, but we cannot reasonably expect the best efforts from the working classes until conditions so change that there is a better balance between supply and demand, and consequently a greater respect for his job on the part of the workman.

It does not seem to me that it is at all a question of the men having "sense enough" to understand this question. Skilled labor certainly has the sense, and I believe would have the disposition if the fact could be strongly enough brought home to them by their own leaders rather than by those whom they naturally regard as stating merely the interests of capital, they not realizing in this connection that the fundamental interests of both labor and capital are identical.

The only way that improvement can be brought about, however, is by an appreciation on the part of employers of the workmen's problems and point of view and a human sympathy not for them, but toward them. This will help gradually to accomplish much more than will be accomplished by antagonistic complaints, even though it sometimes does try one's patience to find any basis of sympathy with the viewpoint or methods of the usual type of union leaders.

J. HARVEY WILLIAMS, President.

## Increasing Efficiency and Production Reported.

The White Motor Co.

Cleveland, O., March 25.

*Editor Manufacturers Record:*

In the absence of our president, Mr. W. T. White, I am answering your letter of March 22 in regard to whether our experience does or does not lead us to believe that labor (so-called) has not been producing.

I am sending you our policy sheet, which gives our industrial plan in detail and is the base of results we have been able to accomplish.

As you will notice by the table in the policy sheet on page 9, as far as we are concerned our men have increased production steadily, especially since 1914. This, however, as we stated, has been caused by three reasons—plant, management and men. At the present writing we see no reason why we cannot continue to increase production for some time to come.

E. W. HULET,

Second Vice-President and Production Manager.



## With an Abiding Faith in American Workmen and American Management, President Michael Looks for Improvement Over Present Undesirable Conditions.

Virginia Bridge & Iron Co.  
Steel Structures, Bridges, Buildings, Etc.  
Works: Roanoke—Memphis.

Roanoke, Va., March 26.

*Editor Manufacturers Record:*

Your letter of March 23 was received during my absence from the office. You have presented a very large question—"Whether labor is becoming more efficient or less so."

Your question might be answered correctly both positively and negatively. From the standpoint of efficiency of improvement in the living conditions of those who labor with their hands, your question might be answered affirmatively. From the viewpoint of increased production for the benefit of all those who have thus benefited in improved living conditions, I believe your question must be answered in the negative.

But I believe there are notable and numerous exceptions to the latter condition, especially in those branches of industry where management and producers have earnestly co-operated for increased production, for increased remuneration to the producer. Then, too, it is necessary for us to assume comparative periods upon which to base arguments and conclusions. Such comparative periods should be normal periods, else the assumed increased remuneration may not be actually greater because of present purchasing power of the increased wage as measured by money.

Since the termination of the war general conditions have been influenced abnormally by the agitation and restlessness of our people under the relaxation of the stresses of war, and much time has been lost by both employers and employees in discussing the claims of the other, resulting in almost immeasurable loss of production, to the detriment and disaster of all.

Under such conditions I do not think it can be successfully stated that as yet there has been increased productive efficiency by labor, skilled or unskilled. Perhaps this conclusion should be illustrated.

Take, for example, the production of coal, a very essential factor in all other production. Certainly, it cannot be said that the agitation for a six-hour day and 60 per cent increase in wages, resulting in stopping of production, court litigation, national conferences and commissions, and the consequent lack of harmony, co-operation, and of suspense and antagonism between employer and employee, has possibly resulted in increased labor efficiency in the coal industry. Then it follows, as a matter of course, that the consequent curtailment of transportation and actual stoppage of manufacture and production for the lack of coal in other industries has actually prevented increased labor efficiency in those and other branches of industry.

Coal is a very necessary article in the production of steel. The stoppage of a normal supply of coal has, with the effect of the controversies between the management and employees of the steel industry, resulted in a greatly decreased steel production, which has been fatal to any hope of increased labor efficiency in transportation and those branches of industry depending upon steel for manufactured production. With an intermittent supply of steel for manufactures, and that supply greatly curtailed, the uncertainty of continued employment, to say nothing of the absolute "laying off" or suspending of thousands of employees for the lack of supply, has the effect of causing those remaining in production to watch the available supply of raw or semi-finished material actually in sight, and to a considerable extent produce manufactured products proportionately to the continued or intermittent visible supply above referred to.

Under such conditions I do not think it could be expected that labor could be "more efficient" as compared with a period when supply was ample and continuous.

Take, again, the great industry of transportation by land and sea. Since 1915 I have failed to observe any general increased efficiency upon the part of railroad labor, either skilled or unskilled. But here again there are notable exceptions. Of course, I have had nothing to do personally with the operation of railroads, and I am basing my expressions upon general observations. I had, during the war, an opportunity to obtain intimate knowledge of lake, port and terminal operations, and I must honestly conclude that there has been no increased labor efficiency in the

industry of transportation. On the other hand, I am persuaded to believe that there has been a greatly decreased labor efficiency because of not only shorter hours of service, with greatly increased labor cost, but because of a limited effort and production and a general feeling of antagonism and controversy against management by the employee, which was painfully apparent to me during the war and since.

A recent newspaper stated that "the number of tons of railway freight moved one mile per employee in July, 1917, was about 21,000, and in July, 1919, only 18,500, showing a serious falling off in production per employee." This statement does not indicate increased labor efficiency. I recall a statement made by the Pennsylvania Railroad a short time ago, illustrating the decreased efficiency of their labor by showing the greatly increased number of employees since the war to perform the same work that a lesser number accomplished before operation by the Railroad Administration. I have forgotten the figures which were given, but I was impressed at the moment by the assertion of decreased efficiency.

These statements are strengthened by the report of the Statistical Bureau of the Department of Labor, showing that in "10 out of 13 selected industries there was an increase in number of persons employed in January, 1920, than in January, 1919, of 39 per cent." This report does not mention increased production, but, as a matter of common knowledge, in several of the industries mentioned there was actual decreased production, and this fact, in conjunction with a 39 per cent increased number of employees, does not indicate increased efficiency. There were 615,000 persons employed in the industries tabulated.

From my observation and investigation I must conclude that in the four basic industries—agriculture, iron, coal and transportation, there has not been, following the war, increased efficiency of labor, either skilled or unskilled, as yet, and if the basic supplies are not available because of turmoil and curtailed production in those basic industries, then it must follow that all dependent industries cannot be efficiently organized on a normal production basis, and under these conditions there can be no efficient production, and from this line of consideration and argument it cannot be determined whether labor is more or less efficient in these dependent industries.

I believe this is due to the abnormal economic conditions, to the agitation and restlessness from several sources. I believe that in the past four months all of our people have begun to realize that permanent success and happiness cannot be obtained for our people except by increased service to each other, increased production by all, less extravagance and luxurious desires, and by thrift and economy.

I have abiding faith in the masses of our American workmen and American management, and when both determine upon a hearty and sincere spirit of earnest co-operation there will be no question as to increased efficiency of either labor or management, and I hope the necessary patriotism and loyalty to country will hasten the destruction of every force that has recently been exerted to prevent that co-operation and earnest effort necessary to re-establish harmonious and productive progress of our American industry.

C. EDWIN MICHAEL.

## Prospects Good in One Big Plant.

Riverside & Dan River Cotton Mills, Inc.

Danville, Va., March 26.

*Editor Manufacturers Record:*

We have in our organization a system of industrial democracy which is based upon the five principles—justice, co-operation, economy, energy and service. Under the operation of this system our people have a fine spirit of co-operation, and, while it cannot be said that all of them have got this spirit, it is my observation that the vast majority have done so, and that there is a manifest increase of personal interest and efficiency. I think that our people realize that the only remedy for the high cost of living is in the direction of producing more and spending less.

It is my idea that a hearty spirit of good-will and co-operation between employer and employee will do more than anything else to encourage the necessary increase of production to meet the world's needs, and, while I am unable to speak of conditions in other plants, I am glad to say that the prospects from our viewpoint are encouraging in so far as our plant is concerned.

H. R. FITZGERALD,  
President and Treasurer.

## Elimination of Extravagance, Practice of Thrift and Increased Production Necessary to Solve Present Perplexing Problems.

Wilson & Co., Packers and Provisioners.

Chicago, Ill., April 6.

### Editor Manufacturers Record:

The present situation in the industrial world indicates a need of sane, fair and practical thinking, out of which should come a satisfactory readjustment. This, I think, applies equally to industry and labor, since the prosperity of both are entirely dependent upon production.

While there has, in my opinion, been some improvement shown in the efficiency of labor during the past few months, I am inclined to the belief that greater progress in this direction must come with a better knowledge on the part of labor that its greatest benefits can only come through increased production. In this, of course, it is self-evident that industry concretely shows its appreciation of the need of greater production by fully co-operating in everything that will add to the output of the nation.

If there is waste, due to any cause of inefficiency, production is lessened and the natural sequence is a direct loss to both labor and industry.

An analysis of the present situation appears to indicate that labor as a whole is more inclined to a favorable acceptance of these principles, and we, therefore, should expect a gradual increase in production.

The efficiency that is necessary to a proper readjustment will only be realized with a more general acceptance on the part of labor and industry of the cardinal economic principles that govern the situation. This, I think, can only be accomplished through an educational campaign under rational leadership.

Coincident with a proper readjustment from the standpoint of maintaining a satisfactory production, I think labor should more fully realize that they constitute a part of the whole as represented by society, and that in benefiting society they are likewise benefiting themselves.

Decreased efficiency as represented by the curtailment of production, intensified in many instances by lack of transportation facilities for handling that which is produced, coupled with extravagances, through lavish spending and otherwise, has greatly affected the cost of living and undoubtedly is cause for general unrest.

Contentment is essential to the maintenance of a satisfactory production, and the readjustment therefore calls for an elimination of the extravagance being practiced and a stimulation of thrift among our people, which, in addition to the maintenance of a satisfactory production properly distributed, should in a great measure solve one of the most perplexing problems confronting our nation.

THOS. E. WILSON.

## Return to Normal Productivity Reported by President of Large Motor Car Company.

Packard Motor Car Co.

Detroit, Mich., April 5.

### Editor Manufacturers Record:

In my opinion, and as reflected in our own organization, the efficiency of labor is improving.

Following the armistice there was an undoubted let-down, a reaction from the artificial conditions due to the war and the strain of the unusual conditions under which we were living and working.

Our own records indicate that productivity has returned substantially to normal, for the same product is being turned out, with the same number of men or less, than before the war. Evidences of social unrest are lessening, and the temper and disposition of the men are, generally, admirable. I do not mean to infer that the problems are solved, or that men generally consider that the world's readjustment has in all cases treated them fairly. There never has been a time when everyone was contented and happy. There are elements of unrest operating today, but I see no prospect of serious or permanent upheaval. Though many men may feel, perhaps, that conditions do not suit them, they do, on the other hand, feel that employers and those in authority are striving as never before to be fair and equitable, and are endeavoring as best they can to solve the difficult problems of the day.

ALVAN MACAULEY, President.

## Skilled Labor as Efficient as in 1914, But Unskilled Less Efficient, and the Reasons Clearly Stated.

Westinghouse, Church, Kerr & Co., Inc.

New York, March 27.

### Editor Manufacturers Record:

In order to frame our answer, which is based on our experience with our own forces, on our own construction work, it is necessary for us to divide labor as a whole into two general groups. The first group consists of the skilled men, or those who have a definite trade, such as carpenters, plumbers, structural ironworkers, plasterers, painters, etc. The second group is comprised of the unskilled men, or those who have no definite trade, and who are usually known as common laborers.

With reference to the first group, our observations are that the actual output per man per unit of time today is the same as it was in 1914. In other words, our conclusion is that the members of this group have readjusted themselves since the close of the war, in general, as well as any other class, and are today practically as efficient as they were prior to the war. Expressed in dollars and cents, of course, the labor cost per unit of output is today greater than in 1914, but this difference is in proportion to the increase in wages and is due to increased wages rather than to a difference in actual efficiency.

Coming to the second group, our observations point to a different conclusion. In this group the actual output per man per unit of time is considerably less today than it was in 1914. Furthermore, the increase in wages in this group has been greater in proportion than the increase in the other group. Therefore, expressed in money, the labor cost per unit of output in this group is much greater than in 1914. The difference is due to both decreased actual efficiency and to the increase in wages.

The immediate cause for this decreased efficiency on the part of unskilled labor is the fact that the demand exceeds the supply. Knowing that he can walk into another job almost any way he turns, the unskilled laborer works just about as he pleases on any particular job. Since the skilled man, however, is in practically the same advantageous position, the real fundamental causes of decreased efficiency on the part of the unskilled worker are probably to be found in the character of the men in this group. Education, training, pride in workmanship, standing in the community, initiative and ambition, all factors which operate to a more or less degree in the case of the first group, are in the main conspicuously lacking in the second group. Hence the tendency in this group is to be governed almost wholly by immediate economic necessity and to proportion effort expended accordingly. With jobs abundant and wages high, therefore, efficiency in this group is almost certain to decrease, nor can it be expected to increase and become as high as formerly until jobs become scarcer and competition for them keener.

F. D. MCGRAW,  
Manager of Construction.

## Increased Interest of the Worker in His Work the Only Means of Material Salvation.

Bemis Bros. Bag Co.

Manufacturers Burlap, Cotton, Paper Bags.

Boston, Mass., March 27.

### Editor Manufacturers Record:

In reply to your inquiry of March 24 in regard to the present efficiency of labor, I regret that I have not time at this writing to go fully into the queries you raise and must content myself with the statement that most of the evidence at my command indicates that labor is less efficient at present than, say, 10 years ago. My comment refers to the textile and building trades. The shorter hours which are being observed in these trades now, as compared with 10 years ago, ought to foster efficiency, but, as a matter of fact, seem rather to foster inefficiency through increased interest in recreative features, like movie shows, joyriding, etc., which leisure time and present wages make possible and attractive.

Our hope as employers in meeting this condition would seem to be redoubled efforts to improve methods of factory management and employment relations, so that we may be helpful in bringing back or increasing the interest of the worker in his work. Through some such means would seem to be our only salvation.

A. F. BEMIS.

## No Improvement in Efficiency or Productivity Seen in New England Cotton Mill Circles.

Pocasset Manufacturing Co.

Fall River, Mass., March 30.

*Editor Manufacturers Record:*

I am in receipt of yours of the 24th, outlining two diametrically opposed opinions on the present efficiency of labor, and while, from my own experience, I cannot endorse the statement of the construction company that there is a decided increase in efficiency on the part of labor, I do not quite like the remark that laboring men have not sense enough to understand the importance of increasing production as a means of solving some of our problems; sufficiently lucid and persistent explanation should succeed eventually in bringing such understanding to the huge majority of our workers.

Personally, with regard to the cotton-manufacturing industry, and particularly in Massachusetts, my opinion is that labor is becoming less rather than more productive. As a matter of absolute fact, each successive advance of wages in the cotton trade has marked a distinct diminution in quantity produced. To my mind, it is only possible to ascribe this to one reason, which is that the tendency among the majority of our operatives is to work steadily for sufficiently long a period to make possible the accumulation of a certain amount of money over and above actual necessities, and then to take a more or less extended holiday. The result is that, where possible, the operatives' places have to be filled during their temporary absence either by less skilled labor or by persons who are not quite accustomed to the particular conditions which distinguish each task, and consequently production suffers. This situation is sufficiently bad, but it is even worse when you take into consideration the fact that, because of high wages, so many formerly steady workers find it possible to take increased periods of leisure, with the result that the total amount of operatives working at any one time is inadequate to fully operate all the machinery available. In view of the huge demand for cotton goods, you may have some idea of the economic loss occasioned in this manner when I state that at least 15 per cent of the whole of the cotton goods manufacturing machinery in the city of Fall River has been idle for the past nine months.

Because of this state of affairs, I can hardly say that I consider labor to be more efficient in the sense that production is greater. So much, however, for the cotton trade. That the situation will grow worse is the view of the pessimist; that it will improve, the view of the optimist; but, frankly, events in this locality hardly justify optimism.

In my opinion, the one great necessity of the day is that labor should come to an early realization of the absolute necessity for increased production; the futility of the expectation of any decrease in living costs without such productive increase is so apparent that it is almost a matter for wonder that labor as a body should fail to see it. We, as employers, may argue as we will against the lessened endeavor of the present-day workman, but all our arguments in favor of increased effort seem to make very little impression upon the people we wish to reach, and are yet viewed in many labor circles with a certain amount of resentment, if not actual hostility. Such a resentment can only arise from insufficient understanding, and the probabilities are that we confine our arguments too much to our own circles—spend too much of our time adding conviction to our already settled convictions—instead of expending the same effort in expounding economic matters directly and simply where explanation would be of most service, among the workers themselves.

Admittedly some of the more enlightened labor leaders seem to have realized that greater production of necessities is essential, but in many directions the fallacy still lingers that restriction of output is some sort of guaranty of greater distribution and security of employment. Surely the inaccuracy of this argument has been so thoroughly exposed that any and every leader of labor should make a great effort to completely eradicate the idea from the minds of the rank and file. Is this inherently wrong theory of what is imagined to be the advantage of restricted production to be so eradicated, or are we to learn by bitter experience that in the direction of restricted output lies scarcity and want and famine; that money is useless except as a means of exchange; that no matter how high wages may be—if the workers had all the money in the world—if commodities have not been produced they cannot be

bought; and that mankind must suffer in proportion to lack of necessities, while paying correspondingly high figures for those available?

To summarize, my opinion is that efficiency, as a synonym for production, is lower in the cotton goods manufacturing industry, and my suggestion for improvement is to teach the worker sound, simple, economic ideas and trust to his own good sense.

W. F. SHOVE, Treasurer.

## Skilled Labor Efficient, Common or Unskilled Labor Very Inefficient.

Wheeling, W. Va., March 25.

*Editor Manufacturers Record:*

Our experience is that our own labor paid by the piece is nearly as efficient as before the war, and it would be fully as efficient were it not for the fact that, because labor generally is scarce and laborers fully employed, we cannot always fill piece-work jobs with experienced help.

Our miscellaneous labor that it paid by the day is much less efficient, and the more ordinary the work is the less efficient the laborer is.

Outside labor that we employ on construction work is shockingly indifferent, and perhaps its efficiency does not rate higher than 60 per cent of pre-war times. To us they are flouters, even if they are in the regular employ of some contractor, and most of them are quite willing to do as little as possible and still hold their jobs.

One of the chief troubles is that many of the unskilled workmen will not work steadily, because they do not have to work steadily to make enough to live on. Of course, most of them work steadily, but there is a goodly proportion that are not taking advantage of the present opportunity to get ahead. It is only by inculcating thrift in the minds of those who are not thrifty that the labor situation can be bettered. Of course, a business depression will make labor more plentiful, and then it will have to work harder to live, but this is an unhappy thing for anyone to contemplate.

It certainly does not speak well for us as a nation that so many of those who work are missing the present opportunity of putting something to one side when it would advantage them so much in the future. I think the inculcation of the idea of thrift in the minds of those who have it not would be a great national asset.

If you think the idea expressed in this letter is worth making use of, please omit our name.

\_\_\_\_\_, President.

## Need of Quick Transportation Stressed by a Leading Cotton Manufacturer.

Greenville, S. C., March 26.

*Editor Manufacturers Record:*

I have your letter of the 24th and note contents with interest. I am willing to write you personally, but shrink from newspaper notoriety, and I am willing for you to use the subject-matter of this letter, but request that my name be not mentioned.

For eight or ten months after the armistice the efficiency of our cotton mill labor was at least 20 to 25 per cent off, but during the last six months there has been steady improvement, and today, while our labor is considerably stretched out, still I believe the individual efficiency is as good as it ever was. This applies to white labor, but the labor, both white and black, employed in construction work is far from efficient, and, while wages are exorbitant, the hands are loafing in a distressing way on their work. Common labor, which in our section is colored, is very lacking in efficiency, very unreliable and wages are so high that if our colored brother works four days in the week, he thinks he has given full return to everybody.

What we sadly lack in our Southern country is more rapid and efficient transportation systems, and we are greatly hampered in meeting New England competition by lack of prompt transportation of our mill products to market.

\_\_\_\_\_, President.



## Alabama Labor Reported as Wasting Time and Buying Too Many Silk Shirts and Silk Hose.

Gulf States Steel Co.

Birmingham, Ala., March 31.

*Editor Manufacturers Record:*

I have delayed replying to your favor of the 22d until I could confer with several of our officials in the various operating departments. The answer that I am compelled to make to you is not a pleasant one. It is, of course, true that men differ in temperament and character—some are naturally more industrious, persevering and adaptable to environment than others. Many men are opportunists, drifting along and governed by conditions, but without having any objective in front of them to govern their lives. Some men, therefore, will naturally be advancing in relative position, some standing still and others falling back. Any answer that may be made as to the relative efficiency of labor must, therefore, be qualified by the foregoing considerations.

Taking it as a whole, we find that labor is much less efficient than before the war. Men do not desire to work as many days or to work as long each day or to work as hard as they used to. This may be qualified in the case of tonnage men who are on piece-work. We have some crews who show sufficient ambition to break records in one or two departments, but that is not the general characteristic of labor today. Take coal miners, for example, with all the force of the Government, the newspapers and the public sentiment crying for large output of fuel. Our miners are not like those in domestic coal mines dependent on seasonable trade; our men can work every week day throughout the year; but instead of working six days habitually, they average from four and a half to five days per week. At the present extremely high wages they could lay by money and on the instalment plan acquire homes. We see no indication of this idea taking root among them, although one man came up the other day and bought \$400 of good bonds. He was an exception. We find that coal miners do not mine the coal as a rule as clean and free from trash and bone and slate as they used to. We have seen analyses of coal ranging up to 25 and even 30 per cent ash; it should never exceed 12 in any merchantable fuel. The general average of coal or of ore or of limestone purchased by us have been below pre-war standards because the lack of care on the part of labor in preparing it.

At the steel works it is frequently the case that our fence weavers, nail cutters or barb wire operators are held back, sometimes losing half a day or a whole one, because of scarcity of wire. We have plenty of machines and plenty of wire rods. After last payday 12 of our wire drawers were idle, positively walking about utterly indifferent to the claims of their brother workmen, who were denied work by their indifference. One of our officials met and spoke with one of these men. His reply was: "What's the use of my making any more money? My wife would just blow it in. I may as well rest up in bed." Another of our officials met a negro woman and asked her if she wanted a job as cook. Her reply was: "Lawdy, white man, I doesn't have to cook for nobody; my nigger makes more money than me and him can spend."

A negro miner came into the office one day to ask us to make him a cash advance against his pay. Bear in mind that we pay in cash every fortnight, and men are not supposed to draw cash before paydays except in case of emergency. He explained his emergency as being that he had \$40 worth of clothes at the express office which he had to take out. He was wearing a better suit than our general manager at the time. The word thrift seems to be forgotten. Laboring men are buying silk shirts from \$7.50 to \$12 each, silk hose, expensive clothing, automobiles, and are not content with Sundays and Saturday afternoons as time for riding around and showing off their finery.

Your letter of the 22d says records of savings banks show that labor is saving a very large amount of money. The Birmingham Age-Herald of today says that the amount of money in the savings banks of Alabama aggregates \$7 per head on the population, and in view of the immense disbursements of money, this does not seem very large. Labor is buying clothes, cars and jewelry; it is not putting its money into houses, furniture and bonds to any extent.

Manufacturing costs are out of sight; everyone complains of the high cost of living. How can it be otherwise when with a given amount of machinery and equipment you get about 80 per cent of

the yield which the same equipment gave before the war? If men would turn around and be in earnest and had the desire to work as they did six years ago, and to put the money by in permanent assets, the condition of the country would be revolutionized; cost of production would be slashed in every direction, and the accumulating stocks of products entering into competition for the market would inevitably reduce prices, and this tendency would be accelerated by the thrift which would keep men back from making unnecessary purchases. The payrolls of this country today are enormous, and with the advent of prohibition the greatest channel of waste has been closed. The money that is earned today might, if properly handled and expended, become an enormous force in the recuperation of the world and to the wealth, comfort and happiness of the American people.

I enclose you an editorial cut from yesterday's Gadsden paper March 28, page 8. Also note the statement, page 11, March 29, on the subject, which is very apposite. Also copy of letter from our steel works manager transmitting the editorial.

JAS. BOWEN, President.

P. S.—See the statement of President Campbell of the Youngstown Sheet & Tube Co. on these subjects, Wall Street Journal, March 29, page 8. Also note the statement, page 11, March 29, Wall Street Journal, of president of a large steel fabricating concern in Pittsburgh, Pa., that the wages in constructing steel buildings have doubled in the past five years, whilst the efficiency has been reduced 50 per cent, and that the cost, therefore, of erecting steel buildings has risen from \$7 per ton to \$30 per ton.

## Believes There Is Only One Way Back to a Condition of Sanity.

Central Coal & Coke Co.

Kansas City, Mo., March 26.

*Editor Manufacturers Record:*

I quite understand the desire of every thinking man, as expressed by you, to wit: "I far prefer to take the view of the concern which shows increasing efficiency in labor rather than what I regard as an exceedingly unwise statement made by the banker in his criticism of labor." I regret, however, I will have to cast the weight of my testimony with the banker. Our own experience shows that labor is 30 per cent less efficient, comparing February, 1920, with February, 1916, meaning thereby the amount of production in February, 1920, per man per day was 30 per cent less than in February, 1916, and this is in the unorganized fields of the South. While the figures are not readily available as to our mining operations, in which our labor is highly organized, it is my conclusion the conditions there are materially worse. In fact, it is my firm conviction, arrived at from personal observation, that everybody is joyriding. Our labor is more flagrant in this respect than others, and this is probably due to natural causes.

I think we classify "labor" and "capital" without fully realizing that by "capital" we refer to those who happen to be possessed of property, and by "labor" those who happen to work for wages. Looking at the matter in an abstract way, we are disposed to treat the two as abstract classes instead of human agencies. There is inborn in man a natural antipathy toward labor. It makes no difference whether the laborer is a brain worker or a manual worker. The only difference between them, so far as I can see, is the degree of education as to standards of living. Sudden increases in earning capacity, whether on the part of brain workers possessing property or those who labor for wages, without a corresponding increase in their standards of living, render it unnecessary for either of them to exhaust their earning capacity in order to supply their wants, and as a result of this situation, if the business man is prosperous, he spends more time on the golf links, while if the laboring man is earning higher wages, with steady employment, he takes more holidays. The result of the whole situation has been a steady decline in efficiency on the part of both management and labor.

These natural tendencies are expressed more forcibly in primitive people. For instance, the standard of living of the average negro laborer in the South has not been developed to the extent that makes it necessary for him to exhaust his present earning capacity to supply his living wants and his pleasures. The result of same, in my judgment, is this class of labor is not

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exhausting more than 50 per cent of its earning capacity, and consequently it is adding to a shortage of labor which does not in fact exist, simply because it will not work.

This is true, even to the same extent, of organized labor in the North, whose compensation has immeasurably increased beyond the cost of his standard of living. Men are intoxicated with sudden wealth and high wages. The recent award in the mining industry will increase the earning capacity of the miner at a time when there are signs of stabilization in living costs, and will accentuate this situation.

The labor turnover in every industry of which I have any knowledge has increased 200 per cent to 300 per cent as compared to the turnover of the pre-war period.

The unfortunate thing is the average laborer does not realize that which he is laboring for is not the gold or currency which he receives as compensation for his work, but that he is laboring for the production of other men who labor as he labors to produce it, and that production, not money, is the source of wealth. If the industrial worker does not labor and produce, he will eventually have nothing to exchange for the production of others.

I am of the opinion that nothing short of a period of depression, which will probably follow the resumption of production overseas, the reversing of balances of trade, will bring ourselves and our people back to a condition of sanity.

CHAS. S. KEITH, President.

### Unwillingness of Young Men to Buckle Down to Work the Chief Trouble.

The Raymond Bros. Impact Pulverizer Co.

Chicago, March 27.

*Editor Manufacturers Record:*

We can only say that, so far as our own experience goes, our men are just about as efficient as they ever were. The perfectly natural instinct to get as much as they can for as little effort as possible is perhaps a little more in evidence at present, owing to the scarcity of men who are "willing to work," and the writer, for one, can see no good reason for expecting labor to carry the burden of increasing production by working harder than before when there are so many hundreds of thousands of young men engaged in the pleasant pastime of "passing the buck" and letting somebody else do the hard work. The tendency of young men to want to wear a starched collar and boss somebody rather than to work is, in the writer's opinion, to blame for the scarcity of mechanics and labor generally, and that is the reason mechanics can demand \$1.25 per hour and get it.

C. M. LAURITZEN,

Vice-President and Manager.

### Standing Still, But Even That Is Better than Going Backwards.

Atlantic Steel Co.

Atlanta, Ga., March 26.

*Editor Manufacturers Record:*

From my own observation and from inquiries made to the operating superintendents in our mills, I am of the opinion that very little, if any, difference exists between the attitude of the men now and of last year, say. In other words, they seem to be at a standstill, neither going forward or backward.

I hope, however, that this is a good indication, and that we will soon see greater efficiency. I cannot help but believe that the men will see the wisdom of it and bring about this result.

THOS. K. GLENN, President.

### A Great Improvement in Efficiency Under Way.

Blaw-Knox Company.

Pittsburgh, Pa., March 25.

*Editor Manufacturers Record:*

It has been my pleasure to be pretty close to our workers, and during the past 60 days I have noticed a great improvement as to the efficiency of the men at their tasks.

The reaction we have had is only natural, but I believe that the pendulum now is swinging the other way, and that American workmen are hard at their tasks and becoming more efficient each day.

ALBERT C. LEHMAN, President.

### Chief Obstacle to Increased Production Is Inadequate Transportation.

Easton, Pa., March 27.

*Editor Manufacturers Record:*

I agree with you that labor is showing increased efficiency as compared with conditions a year ago. I do not base these conclusions of mine upon the records of our company, although these do show somewhat slightly better efficiency on the part of labor. There is, I think, a distinct lessening of the spirit of unrest in labor that was so prevalent during the year following the declaration of the armistice.

While the labor turnover at our plants is still unreasonably high, there are, I think, decided evidences of better conditions in this respect. Labor, also, I should say, is not as dictatorial as it was, for instance, six months ago.

In our line of business I should say that the chief obstacle to increased production is the transportation problem. It seems to me that Government operation of the railroads developed in those who were the directing managers a lack of the sense of responsibility, which under private ownership has always been very highly developed. The habit of "passing the buck," which always obtains in the operation of Government facilities, coupled with this lack of the sense of responsibility and the atrocious weather conditions throughout the northeastern part of the United States, left our railroads in very bad shape when they were turned over to their owners on the 1st of March.

Lack of proper transportation facilities has resulted, in our industry, in very greatly lessened production during the first three months of the year, and also in failure on the part of manufacturers to get a sufficient quantity of our product into the hands of our customers to take care of their needs.

I am very confident that if this condition had not arisen, our labor situation would be much more stable at this time than it actually is.

One can hardly blame labor for endeavoring to get a connection which will insure continuous work with a remunerative wage. While I agree with you that labor is saving a considerable amount of money, I am very confident that it, like all other classes of our population, is wasting a very great deal of its wage. We are all inclined to spend that which comes easily carelessly, and I think that labor at the present time is no exception to that statement.

While I believe that, generally speaking, the reliability of labor and its efficiency is increasing, I look forward to a very strained labor situation during the coming summer. I cannot see how the demand will not be in excess of the supply, and in such a condition of affairs we must expect to see wages increasing and costs increasing. If, however, the transportation system can be brought to normal within the course of two or three months, so that manufacturers and contractors can plan their work in confidence that the material needed will reach them in accordance with their plans, then I believe that we will see a material improvement in efficiency and consequent production.

This letter is not written to be published over my signature, but more to express to you my personal opinion upon the subject of your communication.

President.

### The Crux of Our Economic and Financial Troubles.

Wrightsville Beach, N. C., April 3.

*Editor Manufacturers Record:*

I have read with much interest your able and most creditable reply to the statement of Mr. Geo. J. Seay, governor of the Federal Reserve Bank of Richmond, published in the MANUFACTURERS RECORD March 25, 1920.

I consider the symposium of the farmers and bankers in the MANUFACTURERS RECORD, backed by your independent criticism, is getting at the crux of our economic and financial troubles.

Living at the Capital of the United States for the past 30 years, I have made a close study of these subjects and the legislation bearing upon same, and am sending you by mail a copy of "The Betrayal of the People in the Federal Reserve Act," which has a direct bearing on these two most vital economic problems.

Hoping you will give this publication a careful reading, and thanking you for the great educational work being done in the MANUFACTURERS RECORD, I am,

Very truly yours,

T. CUSHING DANIEL.

## Vigorous Protest Against Attitude of Federal Reserve Board Toward Liberty Bonds Receives Wide Approval.

The letter published in the MANUFACTURERS RECORD of March 11 from I. H. Nakdimen to Governor Harding of the Federal Reserve Board has attracted wide attention. The Southwest American publishes some of these letters as follows:

I. H. Nakdimen, president of the City National Bank, is receiving scores of letters from prominent men in all sections of the country complimenting him for his recent letter to Governor Harding of the Federal Reserve Board, in protest against the increase in the interest rate charged by the Federal Reserve Bank.

Congressman W. W. Hastings congratulated Mr. Nakdimen on his splendid argument.

T. H. Owens, Chief Justice of the Supreme Court of Oklahoma, stated: "I have read your letter to Governor Harding carefully. I congratulate you on the forceful, concise argument presented in this letter. In my opinion, your argument is unanswerable, and I fully agree with all you say."

The governor of the Federal Reserve Bank of St. Louis wrote, stating that "raising the rate so far apparently has not had the effect desired."

W. P. Kemper, chairman of the board of directors of the National Bank of Commerce, Kansas City, wrote, stating that "the letter is an interesting one, and I hope Mr. Harding will sit up and take notice."

D. S. Coleman, cashier of the First National Bank of Vian, Okla., stated that he "believes it will do one of two things. If it is read and accepted in the spirit it is written, it will be a Godsend to the people as well as to the banks, and if not accepted, you will see that it will stir up such a mess with the board that they will try to get your 'goat' for writing it."

Cashier Steele of the First National Bank of Van Buren says: "I congratulate you and I give my full endorsement of your views."

Thos. W. White of Fordyce, Holliday & White, attorneys in St. Louis, writes: "Your letter of February 17, addressed to Mr. Harding, governor of the Federal Reserve Board, expresses my ideas entirely on the subject."

E. E. Morris, cashier of the Bank of Mountainburg, says that "raising the rate of interest would not stop speculation. The speculator will pay any rate. Raising the rate only affects the safe conservative borrower."

C. C. Conlee, president of the First National Bank of Dardanelle, says that "as far as he knows, none of the bankers in this section of the country has ever encouraged speculation. As long as he has been a banker, he has never loaned \$100 for a speculative purpose, and the same applies to all the country banks. Loans are made direct to the producer, and not to the speculator."

The governor of the Federal Reserve Bank of Texas says: "I am quite sure that Governor Harding will give due consideration to your letter for all officers of the Federal Reserve banks welcome constructive criticism."

George Sengel of Fort Worth, Tex., says: "I endorse every word that you say. I feel like coming back to Arkansas and going around making speeches at the same places where I did when the Liberty bonds were sold and apologizing for having done so. It is one of the hardest knocks that we as American citizens have ever received. Urge the people to come to the country's rescue at the time of need, then permit speculators to buy our Liberty bonds at 90 cents. I wish your letter would be printed all over the country."

Letter from C. H. Howe, attorney of Hugo, Okla., says: "I just finished reading your letter to Governor Harding in the Southwest American. I wish to thank you as an American citizen for the able and patriotic suggestion therein. You have expressed the situation plainly, and your logic is sound, and I hope the Federal Reserve Board will be guided by your wise counsel therein and reinstate the former rate of interest."

Chas. H. Sommers, vice-president of the Quanah, Acme Pacific Railway Co. of St. Louis, says: "I read your letter to Governor Harding in regard to Liberty loan bonds and raising the rate. It was certainly a pleasure to read this forceful article. I want to compliment you upon the able manner in which you put this before Mr. Harding, and am particularly pleased to find that the public has had the benefit of your conclusions in this matter

through this publication. You are exactly right, and I hope some good will come of your criticism. It looks to me like every time you go to the bat you knock a home run."

Letter from Pickett Cotton Mills, High Point, N. C., states: "I have read and re-read your letter to Hon. W. P. G. Harding, governor of the Federal Reserve Board, and I heartily endorse your letter as a whole, and I congratulate you on the courage of speaking plainly your convictions, which I am sure will have its effect. It seems to me that the Federal Reserve Board is on the very eve of diverting the Federal Reserve Bank from the very purpose for which they were instituted. Their action of increasing rates which will decrease legitimate credit will as a matter of fact reduce production. The worst feature, to my mind, the Federal Reserve Board has completely failed to keep faith with the people which will also have its effect."

Congressman Edward J. King of Illinois states: "I am in receipt of copy of your letter of February 17 to Governor Harding of the Federal Reserve Board in raising the rate of interest. I have read the letter with a great deal of interest and I frankly state that it is one of the best expositions of the subject I have seen. With your kind permission I shall make use of it in furthering House Resolution 476, a copy of which I enclose and which provides for an investigation of the Federal Reserve act administration."

## Liberty Bonds and Food Supply as Viewed by Farm Paper.

THE MANUFACTURERS RECORD of Baltimore, thanks to fearless leadership, has attacked this plan to force the Liberty bond issues out of the banks holding them. It points out that such a move, and the fact that the Government has already taken \$50,000,000 in profit from the depreciation of Liberty bonds, slaps the buyers of these bonds in the face, and it stands up for the small buyers on the same ground that it stands up for the big buyers. It, of all papers, would favor further extension of credit to industry, if it thought such a move wise, for it circulates among the big industrial leaders and operatives of the country, but it stands for what is right.

This paper, the MANUFACTURERS RECORD, has secured letters from such eminent bankers at R. F. Maddox, the Atlantic National Bank, Atlanta, Ga.; John B. Ramsay, Merchants-Mechanics' First National Bank, Baltimore, Md.; W. E. Connell, First National Bank, Fort Worth, Tex.; E. C. McDougall, Bank of Buffalo, N. Y.; Joseph Wayne, The Girard National Bank, Philadelphia; J. F. Downing, First National Bank, Kansas City; Frank D. Stalnaker, Indiana National Bank, Indianapolis; D. E. Waggoner, Security National Bank, Dallas, Tex.; J. W. Perry, National Bank of Commerce, Kansas City; E. L. Swearingen, First National Bank, Louisville, Ky.; E. W. Decker, Northwestern National Bank, Minneapolis, Minn.; E. W. Clark, First and Old Detroit National Bank, Detroit; A. C. Robinson, People's Trust & Savings Bank, Pittsburgh, Pa., and dozens of other leading bankers in the country, condemning the move of the Government for trying to force the banks to drop their customers' holdings of Liberty bonds, so as to make way for further credit expansion.

True, the railways, which must be rehabilitated, have to compete with Liberty bonds in floating their bond issues for rebuilding the lines, but some way can be had to finance the railways if the Cummins bill has not already furnished the way, rather than to make the holders of Liberty bonds suffer.

**If the excess profit tax is taken off and Liberty bonds made long-time issues, we will stand a chance of getting from under the high cost of living. If something is not done to help the farmers and livestock man over the era of high-priced money that looms, many people may go hungry to bed for lack of bread and meat before another year.**

The Goodyear Tire & Rubber Co. will erect a South American factory just outside the city of Rio Janiero. Construction has begun on the plant, which will probably have a daily capacity of 1500 tires and tubes.



# Visualizing the Vast Opportunities for Development Work by the Railroads of the South\*

By WM. H. STONE.

From actual contact with the industrial departments of all the railroads operating in the Southern and Southwestern States, we know that these departments before we entered the war were materially increasing their efficiency in carrying out the development of the territories contiguous to their various lines. Many of them were employing geologists, chemists and chemical engineers and other specialists to make industrial surveys of their territories, to provide themselves with definite facts regarding the raw materials available and the opportunities which these offered for various kinds of industries.

We also found to an increasing extent that the Southern railroads were exhibiting the resources of their territories in a comprehensive way at many important industrial expositions, and in this way were so spreading the information of these opportunities that business men and financiers in all parts of the country were learning more of the opportunities of the South and Southwest than ever before.

I believe, without question, that the industrial departments of the Southern railroads were entering upon the greatest era of accomplishment that had ever been hoped for. For many years these departments had been devoting themselves to making known their resources; they had gathered together experts in various lines and a fund of information was made available. Unfortunately, all this was practically thrown into discard when the roads were taken over by the Government.

The MANUFACTURERS RECORD protested very energetically at this action on the part of the Railroad Administration, pointing out that we believed one of the most important and vital works which the railroads of the South were doing was concentrated in the industrial departments. Especially did we feel that during the war period, when every energy was being bent to secure a knowledge of raw material deposits and manufacturing opportunities for making those things which were needed for the successful prosecution of the war, that the industrial departments, with their trained men and their accumulated knowledge, could render the Government a service that should for this reason alone justify their continuation.

These appeals, however, were in vain, and all this work was practically stopped, except in a few cases where the corporate organizations of the railroads maintained industrial departments on their own account.

It is very gratifying to see that so quickly after the return of the railroads the executives have recognized the importance of their industrial and agricultural departments and have so quickly started them on their work. These departments are again coming into being at a time when the greatest opportunities lie before them. Today there is a tremendous demand for every kind of manufactured product. We are unable to produce any commodity in sufficient quantity to meet the demand. The result of this will be that many of the South's resources which have been lying idle for so many years will be brought into productivity, and I have no hesitancy in predicting that the South is about to enter upon an era of prosperity in all lines far beyond the fondest hopes and predictions of those best posted on its possibilities.

The statement just made is based partially upon recognition given to the South's industrial advantages by the many governmental commissions that were created to select the best locations in America for vital war industries. In every case men were selected for each commission because they were considered to be the greatest experts in the country in a particular line. They were men who came from every part of the country. They were not influenced or guided by any localized influence in reaching a decision, but viewed the advantages of every locality with an eye single to selecting that one which, in their opinion, would be the very best that could be found for the establishment of a plant that would manufacture these war-needed products to the best advantage for the Government.

I might mention incidentally the committee appointed by the Secretary of War for the location of a synthetic nitrate plant. I want to cite the names of the members of this commission as indicative of the type of men who composed these various committees, to show that they represented not only the best-posted men of the country, but those with thoroughly unbiased views:

Brig.-Gen. William Crozier, Chief of Ordnance, U. S. Army, War Department.

Rear-Admiral Ralph Earle, Chief of Bureau of Ordnance, Navy Department.

Brig.-Gen. Wm. M. Black, Chief of Engineers, U. S. Army, War Department.

Mr. F. W. Brown, Bureau of Soils, Department of Agriculture.

Dr. Leo H. Baekeland, Yonkers, N. Y.

Mr. Gano Dunn, New York.

Dr. Charles H. Herty, New York.

Dr. William F. Hillebrand, Bureau of Standards, Department of Commerce.

Dr. Arthur A. Noyes, Institute of Technology, Boston, Mass.

Dr. Charles L. Parsons, Bureau of Mines, Interior Department.

Dr. Willis R. Whitney, Schenectady, N. Y.

The result of the investigation made of every suitable site in the country was the selection of Muscle Shoals, in the northern part of Alabama on the Tennessee River. This same applies to the selection of the armor-plate plant at Charleston, W. Va.; of the big powder and explosive plants at Nitro, W. Va., Hadley's Bend, Tenn., and many other chemical and associated industries that were established in all parts of the South.

We cannot attach too great importance to the location in the South of these vital war industries, because the very selection of the South for them carries with it the final conclusions of the greatest experts of the land that the South possesses the advantages of raw material and manufacture not exceeded by any other section of the country.

I wonder sometimes if all of us feel what the establishment of these great war industries in the South really means. Surely we could expect no greater endorsement of the claims that your industrial departments and the MANUFACTURERS RECORD have been making for the South for many years than the conclusions expressed by these experts after their study of the nation's resources. There is no question that if you would take the reports of these various committees and study and analyze them you would find here a basis for development possibilities that would be simply amazing. And, moreover, they would enable you to build up arguments for the location of industries along your respective lines that could not be matched by any other locality in the country.

Many of you remember the special tour of the Appalachian South that was made by the American Electrochemical Society in the spring of 1918. It required a great deal of work to secure a favorable decision by this society to make this trip. Many of the members were skeptical as to the value of such a journey; some of them even thought the time would be wasted. All the various difficulties, however, were overcome and the journey was made. I was with this Society throughout the trip, and have never seen a body of intelligent, educated and well-posted men have their eyes opened wider than these people after they had visited that "wonderland" of resources in the Appalachian South. They were simply amazed at the opportunities that existed, and it was a consensus of opinion among them that of all the places they knew in the country, none matched the Appalachian South as a location for tremendous electrochemical and electrometallurgical developments.

It might be interesting in this connection to quote the conclusions of a few of the noted men who made this journey. Here again you have added testimony as to the variety and extent of the resources of the South.

Dr. Colin G. Fink, president American Electrochemical Society, Director of Research, Chile Exploration Co.:

"Most of the members participating in the trip have been thoroughly convinced of these facts. The trip through the Appala-

\*Address by Wm. H. Stone of the editorial staff of the MANUFACTURERS RECORD before organization meeting of Association of Railway Development Agents of the South, held in Birmingham, Ala., April 6, 1920.

chian South has been a great inspiration to all of us, and we little dreamed of the great opportunities that are offered by the States of the South for fostering one of the greatest electrochemical centers of the world."

E. G. Rippel, sales manager Buffalo Foundry & Machine Co., Buffalo, N. Y.:

"I believe that the South is bound to become one of the great chemical and electrochemical industrial centers in the country. With extensive water-powers available for development, and a wide range of raw materials suited for these industries, there is every reason to look for a great expansion in these lines. What is needed, however, is capital and men having the required experience in these industries to undertake this development."

F. J. Tone, president-elect American Electrochemical Society, president Carborundum Company:

"This investigation which the Electrochemical Society has made of the resources of the Appalachian South will, I believe, bring most important results.

"The great work before the society at the present time is to see that the entire electrochemical energies of the country are devoted to winning the war, and that full preparation is made for the commercial contest which will follow. We have now learned something of what the resources of the South really are.

"No one could see these and the many other developments of which they are typical and not realize that some time in the very near future a big electrochemical center will come into being in this region, stretching from Kingsport to Birmingham."

Dr. Carl Hering, past president American Electrochemical Society, past president American Institute of Electrical Engineers:

"The wonderful resources of the Appalachian South, combining as they do the raw materials with the very necessary cheap coal and water-power, were a revelation to most of us. The progressive spirit, which was continually in evidence, when combined with these rich resources, gives assurance of rapid developments."

But let me carry you a step further and refer briefly to the impression that was made at the great chemical expositions in New York by the Southern railroad exhibits in 1917. At the 1916 Chemical Exposition in New York one Southern railroad had an exhibit of mineral deposits along its line. This was the Carolina, Clinchfield & Ohio Railway. At the 1917 exposition five Southern railroads had exhibits through their industrial departments. These included the Carolina, Clinchfield & Ohio; Southern; Norfolk & Western; Nashville, Chattanooga & St. Louis, and the Central of Georgia. These five railroad exhibits were undoubtedly the big feature of the chemical exposition of that year and served to attract the attention not only of great manufacturing experts, but of important financiers and business men who have headquarters in New York. And I do not doubt that greater benefits were achieved in spreading definite knowledge of Southern opportunities through these exhibits than at any other exhibition ever held in this country.

To bring out a few evidences of the impression which these exhibits made, I want to quote briefly from two or three of the country's leading chemists:

Dr. Charles H. Herty, editor *Journal of Industrial and Engineering Chemistry*, and former president American Chemical Society:

"One of the outstanding features of the exposition just closed was the splendid showing of the natural resources of the South.

"During the exposition it was my pleasure to show these exhibits to the representative of one of New York's largest banks, to explain to him the thought underlying these exhibits, the logical connection between this raw material and the machinery apparatus and finished products in adjacent booths. It needed no words to make clear the important role capital must play in making this raw material, through chemical means, of greatest value to this nation.

"The contribution of the South to the wealth of the nation through the chemical development of its natural resources may yet prove one of the most important factors in lifting the load of national debt now being incurred for the carrying out of the war for righteousness, peace and fair dealing between nations."

Dr. L. H. Baekeland, member Naval Consulting Board, Yonkers, N. Y.:

"There are few spots in the world which seem more adapted for the development of an enormous chemical industry than some of

our Southern States. Not only is there an abundance and a great variety of raw materials used in chemical manufacturing, but immense deposits of cheap and good coal, which, together with steadily improving freight facilities, offer opportunities which are obvious."

Dr. J. B. F. Herreshoff, New York City:

"I was deeply impressed on seeing the wonderful display of natural resources from many of our States, especially from the South, which our railroads had the foresight to exhibit.

"From these resources (including ores, minerals, clays, etc.) a great variety of products are manufactured, in all of which the application of chemistry plays an important part."

Dr. Arthur D. Little, president A. D. Little, Inc., Boston, Mass.:

"No section of this notable exposition was more interesting and significant than the striking exhibits of Southern resources displayed in admirable form by the States of Louisiana and Texas and by several Southern railways. Best of all, there were men behind the exhibits filled with justified enthusiasm, keenly alive to their opportunity and making the most of it. As a result, the exposition has developed in the minds of thousands of visitors an altogether new appreciation of the remarkable potentialities of the South and the advantages it offers for the establishment of chemical industries."

Dr. M. C. Whitaker, vice-president and general manager United States Industrial Alcohol Co.:

"The exhibits in the Southern section of the Chemical Exposition are extremely valuable to the chemical profession, for they enable the chemist to study the raw materials available for chemical industries and know where they can get them. Every man I have talked to who has seen the exhibit expressed amazement at the variety and extent of the resources displayed and the many important plants of various kinds in the South as shown by the photographs in the different exhibits.

"One eminent chemical engineer, after looking over the machinery and equipment exhibits on the first floor, came to the second floor and went through the Southern section. He said he was simply astonished at the possibilities of the raw materials shown by the South."

Dr. Bernard C. Hesse, New York City:

"Showing so many fundamental raw materials available in the South for a chemical industry in its specialized as well as in its most highly diversified sense should give a lasting impulse to far-sighted development and ultimately create a self-contained and highly diversified domestic source for most of the chemical products required in our nation's business and defense."

You cannot get away from definite statements of this kind. Men of this type do not say such things to be gracious, but because they want to give expression to the impression that is made upon them. They knew when these statements were made that they were for publication, and I am of the opinion that they would not for a moment care to have such splendid endorsements come from them, unless they knew the facts they were expressing were true.

Unfortunately, since the industrial departments were disbanded by the Railroad Administration there have been no exhibits of Southern raw materials at the chemical expositions since 1917. I know from statements made by railroad representatives who were present at the 1917 exposition that at least 10 or 12 Southern railroads would have been represented in 1918 had they been permitted to do so. The result of their inability to exhibit meant the wiping out of the Southern section, which was becoming a great feature of the annual chemical expositions. It would be a splendid thing if we could re-establish this Southern section in the chemical expositions again, and I have no hesitancy in stating that of all the expositions I know of that are held in the country there is none I could recommend higher than the chemical exposition as a place where Southern raw materials can be exhibited with greater assurance that they will be brought to the attention of the kind of people directly interested in their development.

When we think of all these things we cannot help becoming intensely enthusiastic as to the opportunities immediately lying before the South. The war undoubtedly gave great impetus to Southern development and served to bring out in an impressive way the wonderful possibilities offered in this section for agricultural and industrial expansion. Bearing upon its growth we

might review briefly some of the statistics of the Southern States in 1919 as compared with the entire country in 1880:

	United States, 1880.	The South, est'd. 1919.
Population .....	50,155,000	37,000,000
Land area, square miles.....	2,974,000	945,000
Manufactures:		
Capital .....	\$2,790,273,000	\$5,000,000,000
Products, value.....	\$4,389,579,000	\$6,000,000,000
Cotton mills:		
Capital .....	\$308,000,000	\$8607,492,000
Spindles, active.....	10,653,000	14,955,000
Looms, active.....	226,000	285,000
Cotton used, pounds.....	750,344,000	1,767,000,000
Pig-iron produced, tons.....	3,835,000	4,000,000
Coke produced, tons.....	3,338,000	210,000,000
Lumber cut, feet.....	18,087,356,000	18,500,000,000
Agriculture:		
Products, value.....	\$2,212,541,000	*\$6,000,000,000
Cotton crop, bales.....	5,756,726	11,639,653
Corn, bushels.....	1,717,435,000	990,000,000
Wheat, bushels.....	498,550,000	210,000,000
Oats, bushels.....	417,885,000	244,000,000
Livestock:		
Cattle, number.....	34,932,000	21,866,000
Sheep, number.....	42,192,000	8,616,000
Swine, number.....	47,682,000	29,025,000
Mineral products, value.....	\$400,883,000	\$1,350,000,000
Coal mined, tons.....	71,482,000	170,000,000
Petroleum produced, barrels.....	26,286,000	175,000,000
Phosphate mined, tons.....	211,000	2,500,000
Railroad mileage.....	93,200	92,000
Exports, value.....	\$835,639,000	†\$1,316,038,000
National Banks:		
Resources .....	\$2,105,787,000	\$3,929,052,000
Capital .....	\$466,365,000	\$432,230,000
Individual deposits.....	\$333,701,000	\$1,617,686,000
Other individual deposits.....	\$1,300,533,000	\$2,000,000,000
Property subject to general taxation, true value .....	\$44,000,000,000	\$40,000,000,000
*Farm crops, excluding livestock.		
†1918.		

\$† At present value of mills and machinery this capital would probably be doubled.

When we comprehend these figures we cannot but be amazed at the really stupendous progress which the South has made, and this causes us to look forward with increased enthusiasm to its future possibilities. This enthusiasm is considerably enhanced when we realize that great as this development has been, we have as yet but scratched the raw materials of the Southern States. And, further, when we have in mind the opinions expressed by the great experts whom I have cited, it is easy to visualize the really tremendous possibilities available for further development along industrial lines.

The great progress which the South has made industrially is well matched by its tremendous growth agriculturally. The statistical department of the MANUFACTURERS RECORD recently had occasion to compile some figures from the monthly reports of the United States Department of Agriculture. These figures showed that the estimated value of all crops in 1919 for the South was over \$7,000,000,000, and for the rest of the country outside of the South, \$8,768,000,000. In other words, the South last year produced 44 per cent of the entire crop values of the country in 1919. Let me briefly read some editorial comments and analysis by the MANUFACTURERS RECORD concerning these statistics:

"North Carolina had crops last year valued at \$683,000,000, as compared with the five-year average of 1913-1917 of \$258,900,000. In South Carolina the average of the five-year period of \$212,100,000 rose to \$520,500,000 last year. These two States make a remarkable record scarcely surpassed by any other part of the country. It is an interesting fact that California, with all of its vast agricultural wealth, had a total crop production last year of \$45,000,000 less than South Carolina and \$208,000,000 less than North Carolina. Oregon and Washington, which boast mightily of their vast agricultural potentialities, are not even among those who also ran, as compared with the Carolinas or with other Southern States.

"Under these circumstances it is not to be wondered at that there is amazing progress throughout the South and that the bank resources of this section are growing with a rapidity that literally astounds the Treasury Department.

"The most gratifying feature, however, of the whole situation is that this gain is based so largely on diversified agriculture and on the very fact that while there is a decreasing grain production in the rest of the country, as shown by last year's figures, there was an enormous increase in grain production throughout the South.

"It will take some years of this abounding prosperity to give to the South the great accumulated wealth of the North and West. For 50 years those sections were piling up billions on top of billions of dollars while the South was struggling to overcome the

bankruptcy of 1865. Fifty years ago the North and West were already high up on the rung of the ladder of abounding prosperity; the South was down at the bottom struggling to get a foothold on the first rung. It is climbing upward now. It begins to see the daylight shining over the depth of poverty out of which it has been moving steadily upward. What it has accomplished in the last few years is only indicative of the vastly greater things which will be achieved during the coming years.

"Heretofore the great industrial and railroad interests of the South, with the exception of cotton mills, have been largely owned in other sections. Whatever profits were made by the sulphur mines, and the coal mines, and the iron furnaces, and the railroads, were largely paid to Northern and Western stockholders. The South got the benefit of the employment that was created, but it did not own the capital of these institutions. The balance of trade, therefore, was enormously against this section—to a greater extent indeed for many years than the balance of trade will be against Europe—but now the balance of trade is turning toward the South. The millions and tens of millions which it has annually paid to Northern and Western insurance companies, to Northern and Western financial institutions for money advanced, the profit on much of its industrial development which has gone to stockholders in other regions, will be offset by the South's ability to finance itself and to command a respectable price for its cotton and for other things which it is producing for sale elsewhere.

"The nation may well rejoice that this great national asset, the South, the greatest undeveloped asset of this or any other country, is at least earning for itself and for the nation dividends commensurate with the resources with which it has been so marvelously blessed by nature.

"The South has about one-third or over of the livestock of the country, having about 40 per cent of the country's swine, but a somewhat smaller percentage of cattle and sheep. Based on the total value of meat products of the entire country during last year, the South had a total for livestock products of about \$3,000,000,000. Adding this to the crop values gives a total approximate value of the South's agricultural output in 1919 of \$10,000,000,000. This is \$300,000,000 in excess of the aggregate value of all farm products, crops and meats for the United States in 1915, which was the highest total ever reached up to that time. It is just a little less than half of the total value of the entire country of all farm products for 1918. These stupendous amounts give some indication of the amazing advance in diversified farming and in the agricultural wealth of the South.

"Of this stupendous total of \$10,000,000,000 as the value of the South's agricultural productions last year, it must never be forgotten that nearly four-fifths of this sum is due to diversified agriculture and but little over one-fifth to cotton. And yet there are millions of people in this country who still believe that cotton is the chief factor in the South's agriculture and in its wonderful advance in wealth during the last few years.

"The amazing agricultural wealth which we have summarized is rapidly being fully equaled by industrial growth, and now the whole South throbs with the vigor of life and the onrush of what a few years ago would have been regarded as unbelievable prosperity. And yet this is only the beginning, only the first ray of the rising sun of prosperity."

These brief references to the industrial and agricultural growth of the South have been given largely in values which are stupendous, even when we have become accustomed to think of stupendous sums of money in the way of war expenditures. Before leaving these statistical references to the South, however, I want briefly to quote some few percentages showing the South's position in relation to the country. Today the South produces:

- About 100 per cent of the country's bauxite.
- About 100 per cent of the country's barytes.
- About 100 per cent of the country's fuller earth.
- About 99 per cent of the country's sulphur.
- About 99 per cent of the country's phosphate rock.
- About 99 per cent of the country's aluminum.
- About 60 per cent of the country's graphite.
- About 56 per cent of the country's natural gas.
- About 56 per cent of the country's natural gas (gasoline).
- About 50 per cent of the country's petroleum.
- About 45 per cent of the country's asphalt.
- About 33 per cent of the country's lime.
- About 33 per cent of the country's pyrites.
- About 33 per cent of the country's talc and soapstone.
- About 32 per cent of the country's coal.
- About 24 per cent of the country's lead and zinc.
- About 22 per cent of the country's coke.
- About 20 per cent of the country's cement.

This display of statistical figures about the South is so exten-



sive and so awe-inspiring that when we think of them ourselves we almost feel like you would have to build a high fence around the South to keep people out of it. You know, however, as well as we, that the people outside of the South do not always take these figures seriously. As a matter of fact, I sometimes feel they do not believe them. For nearly 40 years the MANUFACTURERS RECORD has been showing by statistics the tremendous growth and expansion of the South and has disseminated this information over every part of the country, and even though these figures are based upon governmental reports or conservative estimates, many people have not believed them.

You and I know, however, that these figures are true, and the problem before us is to make those in other parts of the country realize the facts we are presenting. This work is one that is closely allied with that which comes under your charge, because if you are going to attract new industries to your respective territories, if you are going to cause manufacturers and financiers to look with favor upon the opportunities you offer, you have got to impress them with what has been done and with the things that can be done. It will not do to confine this to generalities; thorough investigation must be made by experts whose word will be accepted anywhere in industrial or financial circles. And when you get this information you have got to keep it persistently and at all times before the people you want to reach. This means intelligent publicity, broad, constructive and educative advertising, and both on a scale commensurate with the splendid opportunities available for development.

The work is, indeed, one which should appeal most interestingly to anyone who studies the situation, and it is to be hoped that the Southern railroad executives in their knowledge of it will appreciate the tremendous possibilities for good through a liberal provision for the work of your departments, so that this can be carried on in a way that will enable you thoroughly to investigate and know your territory, and thus bring about a full co-ordinated development, based upon the opportunities offered.

Right here I want to quote a very pertinent editorial comment by Mr. Edmonds on the problems facing railroad executives and incidentally the work in your charge:

"Notwithstanding the handicaps under which the railroads will take up their work after March 1, they must achieve greater results than they ever did in the past, or private ownership of railroads will be doomed. In the past there was entirely too little regard for the rights of the public. The view of too many railroad people was narrow, and there was at times an utter disregard of the little things which would make for public commendation or condemnation. Unless the railroads meet this condition promptly and broaden all of their work, they will make certain a fight for Government ownership which might ultimately win. The public favor must be secured to a far greater extent than ever in the past, and the railroad people must recognize that they were responsible for public hostility. Had railroads been properly managed, and had everybody connected with railroads, from the president down to the brakeman and the clerks, recognized their responsibility to the public, there would never have been created a spirit of hostility such as exists, and for which the roads are paying and for which they will for years suffer. Railroad management will need bigger men, men of broader vision than the roads ever had in the past, and in connection with this work there must be taken up a larger scheme for the utilization of the resources of the country tributary to every line. No road in the South or Southwest can afford not to re-establish its industrial and agricultural departments, and to back it up with a larger amount of money than was ever expended in the past. This is just as essential as any other feature of railroad work. Many of the men connected with these agricultural and industrial bureaus were men of broad ability, but they were tremendously handicapped by the narrowness of vision of the owners of the roads, who subscribed only a beggarly sum for the activities of industrial bureaus. There should be a change so radical that these industrial bureaus can be handled on a far broader scale than ever before, and there must be secured the active work of men of the greatest ability in scientific work and in agriculture in carrying on this campaign."

To my mind there are no railroad men who come into closer personal touch with the people than those in the industrial and agricultural departments. Your contact, therefore, gives you the best opportunity of all in re-establishing the railroads in the

people's favor and in building up a good-will for your lines that cannot be measured in money.

You are, therefore, making a very wise move in your plans to organize an association of those engaged in industrial and agricultural development in the South. Such an organization can accomplish much good, and I predict that if you throw yourselves into it whole-souled and with a determination to work together you will accomplish results of great magnitude.

There is no need for petty jealousies or rivalries in your work. Not only are you men too big and too broad for that, but you also have a field in which there is room for everyone to grow to the fullest extent of his energies without tramping on the toes of any other man.

By working closely together, pooling your ideas and plans and presenting a solid front in this great work, you will create tremendous enthusiasm at home and convince capitalists and manufacturers elsewhere. You have a great opportunity through this association you are organizing, but be sure in creating it you are going to make it a real, active, dynamic and co-operative force that will stand for action and get you somewhere. Don't let it flare up and die out like so many movements in the South.

The work before you is a glorious one; it is sufficient to test the best that is in every man engaged in it; but in undertaking this work you can do so with assurances that you have behind you resources unmatched by any other section in America, and that upon them you can build a co-ordinated industrial development in the South that will indeed make this section the nation's greatest asset.

## **\$53,000,000 ADDED TO CAPITALIZATION.**

### **Whitaker-Glessner Company of Wheeling Makes Increase and Outlines Plant Additions.**

Last week the stockholders of the Whitaker-Glessner Company, Wheeling, W. Va., held their annual meeting and increased that corporation's capitalization from \$7,000,000 to \$60,000,000. This increase of \$53,000,000 is in accordance with the proposition announced several weeks ago. The management's report for operations during 1919 contains interesting statements indicating the great extent of the Whitaker-Glessner enterprise, and it included the following information: Total income for 1919, \$7,015,835, surplus to balance-sheet, \$18,890,509; year's shipments, \$29,222,712; payrolls, \$9,356,049; extra expense under merit system to employees, from executives to initial activities in the company's service, \$80,005.50, these payments being made to 226 persons. The largest amount paid to any one was \$4000; expenditure for property, additions and improvements, \$1,052,140.

The report also outlined additions in progress or authorized and expected to be completed during 1920 as follows: Portsmouth (O.) works, 18-inch continuous sheet bar and billet mill; blast furnace power-house addition; equipment for handling river coal; Wheeling mills, new boiler and power-house; Wheeling corrugating department, new tinhouse and ceiling factory at Wheeling; new warehouse and factory building at Kansas City, Mo.; Wheeling can department, new can storage building at Warwood; Beech Bottom Land Co., store building and dwellings for 100 families.

## **Enormously Increasing Wealth of North Carolina.**

Raleigh, N. C., April 10—[Special.]—North Carolina is now producing greater wealth in one year than it has heretofore been willing to put on its tax books in 250 years! This year, 1920, it sets down actual values. Without an effort the State paid into the United States Treasury last year \$100,000,000 for revenue stamps and in taxes on incomes and excess profits. The Federal taxes on personal incomes and excess profits were \$23,000,000, while the total value of all the church properties is only \$2,000,000; that is \$25,000,000. These income and excess profits taxes were paid by 4000 corporations and 23,000 people.

The State of Kansas is just now letting the world know that it is a "Billion-Dollar State." North Carolina is nearer being a "Two Billion-Dollar State." Its showing in 1919 puts it high, indeed. Here are some figures: Crop values produced in 1919, \$683,000,000; manufactured products, \$750,000,000; farm animals and products, \$100,000,000; fisheries, \$3,000,000; mines and quarries, \$6,000,000; fire wood cut, \$25,000,000; lumber and timber cut, \$150,000,000; cottonseed, \$30,000,000.

## Summary of Southern Industrial Activity Since January 1 Shows Development of Every Kind on Tremendous Scale.

Throughout the South, from Maryland to Texas, there is every indication that the great prosperity now prevailing will continue for many years. Manufacturing plants are producing at their greatest capacity, and in many instances overtime production is found necessary in order to keep pace with the increasing demand for their thousands of products. Plants of every description are being established to continue the development of Southern raw materials and news announcements by the MANUFACTURERS RECORD are constantly emphasizing the importance of these conditions and the tremendous growth to follow.

During the past year this industrial progress has been especially remarkable in cotton milling, and since January many important enterprises requiring the investment of great amounts of capital have been announced. Development in many other avenues of activity have been almost as noteworthy. Million-dollar projects no longer seem large in amount, million-dollar reports being numerous and many largely exceeding that amount. The principal announcements referred to include plans outlined for expenditures as high as \$58,000,000. Following is a brief resume covering some of the more important enterprises detailed in the columns of the MANUFACTURERS RECORD for the first three months of this year:

More than \$39,000,000 will be the investment for buildings, machinery, engineering, operatives' dwellings, public utilities, etc., for Southern cotton factories announced since January 1. These include both new mills and those established plants being extended. For the first three months of the year the number of spindles announced was 487,799, while the looms numbered 17,294. This is the most active quarter period ever known in cotton mill building progress in the cotton-growing States.

Figures prepared by the MANUFACTURERS RECORD show that there are about 400 Southern mills for manufacturing knit products, the total capitalization being \$35,000,000. These 400 enterprises include 50,000 knitting machines with 50,000 operatives employed and the daily capacity is 215,600 dozen pairs of cotton hosiery, besides large quantities of underwear and other knit products and a quantity of silk hosiery. That daily capacity of hosiery is the output of about 300 mills, the other 100 being engaged in the production of other knit goods.

Bonds to the amount of \$25,000,000 for building roads were voted by the State of Alabama. Plans are in progress for offering \$2,000,000 of these bonds so that construction can begin and the remaining bonds will be offered from time to time.

Oil refineries, gasoline plants, pipe lines, etc., will be constructed at a cost of \$58,000,000 by the United States Producers Refineries Co. of Shreveport, La. These developments will extend over the next several years and include five large casinghead gasoline plants, two absorption plants, a large oil refinery at pipe-line terminus on east coast, docks and tank farm with loading facilities, including storage capacity of 3,000,000 barrels on east coast.

P. H. Hanes Knitting Co., Winston-Salem, N. C., increased capital from \$2,000,000 to \$12,000,000 in order to extend its facilities, and immediate plans include constructing a six-story 210x83-foot reinforced concrete building, for which contract has been awarded. Knitting, dyeing, drying and napping machinery has been ordered for installation in this structure.

Paramount Oil Co., Shreveport, La., organized with \$10,000,000 capital to build 1500-barrel daily capacity refinery for lubricating oils and 7000-barrel topping plant with 50-mile pipe line and tank farms.

Mining phosphate and manufacturing fertilizer is the purpose of a \$5,000,000 corporation organized at Mulberry, Fla. This corporation is the Farmers' Co-operative Phosphate & Fertilizer Co.

Globe Shipbuilding & Dry Dock Co. of Maryland was incorporated with \$5,000,000 capital to build shipyards on the waterfront at Baltimore. Machinery has been purchased and buildings are being erected, the plant to be equipped for constructing all-steel 9000-ton cargo vessels.

Simms Petroleum Co., New York, awarded contracts for additional facilities costing \$5,000,000 in Louisiana. These additions will include a 300-mile eight-inch pipe line from the Homer field in Louisiana to tidewater near New Orleans, with pumping stations at intervals of four miles.

West Virginia and Kentucky coal land to the extent of 15,000 acres will be developed by the W. E. Deegans Consolidated Coal Co., Huntington, W. Va., organized with \$5,000,000 capital. Ten mines will be opened and equipped with electrical machinery for an annual output of 1,000,000 tons of coal.

Having completed its 12-mill plant as originally designed, the Eastern Rolling Mill Co. of Baltimore has decided to double its facilities this year. Stock for \$3,000,000 has been issued and a further issuance of \$2,000,000 is proposed. The plant now has 12 hot mills with intermediate and finishing section, and departments for pickling, annealing, cold rolling and finishing for an annual output of 50,000 to 60,000 tons of metal sheets for manufacturing automobiles, furniture and other products.

An additional hydro-electric plant costing \$4,000,000 will be constructed by the Georgia Railway & Power Co. of Atlanta. This development will furnish 75,000 horse-power generated on the Tugaloo River, in Habersham county. All contracts have been awarded.

Plans were completed and building contracts awarded for the Baltimore plant of the Columbia Graphophone Factories Corporation of Maryland. This building contract amounts to about \$2,500,000, and was secured by the M. A. Long Company of Baltimore, the structures to include the following: Six-story reinforced concrete building of 525,000 square feet floor space area for cabinet factory; 100x195-foot adjacent building for power-house; 500x76-foot drykiln for processing lumber. About \$1,100,000 will be the cost of machinery, engineering, site and other necessities, making this a \$3,600,000 plant for manufacturing graphophone cabinets, metal parts and disc records.

Henrietta Mills, Caroleen, N. C., will expend \$3,500,000 for additional cotton manufacturing facilities. This company's plans include additional machinery with 50,000 spindles and 13,000 looms, besides several hundred cottages and the necessary extensions of mill village public utilities.

Capitalized at \$3,000,000, the Doris Motors Corporation has been organized at St. Louis with plans for an annual output of 300 passenger cars and 1000 trucks.

An investment of \$1,000,000 for additional compresses and kindred facilities is planned by the Shippers Compress Co., organized with \$3,000,000 capital. This enterprise is of Macon, Ga., and it acquires 18 plants in six Georgia cities, four Alabama cities and three Florida cities. Four of the Georgia plants will be enlarged, each at a cost of \$250,000.

Sugar-cane will be cultivated and refined into sugar near New Orleans by the South Atlantic Sugar Co. of St. Louis. This new corporation has been organized with \$3,000,000 capital and plans to grow 99,000 tons of sugar during its first season, this cane to be refined at a \$1,000,000 plant which the company will build for handling both Louisiana cane and raw sugar imported from Cuba. It has a big plantation with 4½ miles of frontage on the Mississippi River and 14 miles of canals. St. Louis, New Orleans and Boston capitalists control the enterprise.

General street improvements and paving planned by the city of Fort Worth, Tex., call for an expenditure of \$2,500,000. The municipal officials expect that the improvements under consideration will be completed within the next 18 months.

Plans and specifications for building 45 miles of concrete highway in Wichita county, Texas, were accepted in connection with contracts awarded at \$2,115,000 for the construction involved.

Engine cylinders, gear cases and other parts for various types of automobiles will be manufactured by the Kennedy Corporation, Baltimore, organized with \$2,000,000 capital. This company has a 4½-acre site on the waterfront, and will build a plant to include four open-hearth melting furnaces operated by fuel oil and seven annealing furnaces using powdered coal.

With \$2,000,000 capital, the Sterno Corporation organized at Baltimore for the purpose of building a plant to manufacture heating devices. These devices will burn alcohol, and they are for installation in automobiles and boats. The plant will be located on the waterfront.

Plans were accepted and contracts awarded for big additions

previously announced for the Riverside & Dan River Cotton Mills at Danville, Va. They provide for building construction to cost \$1,500,000 and for machinery to cost \$2,000,000, this equipment to include adding 35,000 spindles with 1700 looms and electric-power drive. The principal new building will be of reinforced concrete, four stories high and 840 feet long by 144 feet wide.

Engineer's plans were completed for the Oil Belt Power Co., Eastland, Tex., to build a hydro-electric plant reported to cost \$2,000,000. This development is to generate 8000 horse-power for transmission at 12,000 and 60,000 volts in the Eastland district.

Colored cotton cloth will be the product of the Stonecutter Mills Co., Spindale, N. C., organized with \$2,000,000 capital to build a mill of 20,000 spindles, 500 looms, dyeing equipment and finishing machinery, all driven by electric power. This enterprise will include a one-story 420x157-foot mill-construction shed for the looms and a two-story 252x100-foot building for the spindles, besides a complete mill village.

Contracts were awarded for an additional plant, costing \$2,000,000, for the Libbey-Owens Sheet Glass Co. at Charleston, W. Va. There will be a new concrete, steel and brick building 543 feet long by 532 feet wide, equipped with machines for a daily capacity of 4000 50-foot boxes of sheet glass.

Steinmetz electric power automobiles will be assembled at Baltimore by the Steinmetz Electric Motor Car Corporation. This company has organized with \$2,000,000 capital, and its directors include Charles P. Steinmetz, chief engineer of the General Electric Co. at Schenectady, N. Y. As a nucleus for its plant, the company will buy buildings already erected and machinery already built at a cost of \$250,000.

Capitalized at \$1,800,000, the Stowe Spinning Co. has been organized to build a 22,000-spindle cotton-yarn mill at Belmont, N. C. This company's plan includes constructing a 530x127-foot mill and equipping it with spinning machinery driven by electric power.

Combed cotton yarn will be manufactured by the Priscilla Spinning Co., Ranlo, N. C., organized with \$1,500,000 capital to construct a steel building and equip it with 25,000 spindles.

Webster and Braxton counties coal land in West Virginia will be developed by the American Fuel Co. of Palmer, W. Va., organized with \$1,500,000 capital by Philadelphia investors.

About \$1,500,000 will be the investment of the Locke Insulator Co., Victor, N. Y., for land, buildings, machinery, etc., for a manufacturing plant at Baltimore. This will be a 24-kiln plant, employing 700 operatives, and its output will be porcelain products for electrical insulating purposes.

Contract for building a 50-mile highway in Arkansas was awarded at \$1,211,910. It provides for constructing a concrete road 17 feet wide as a part of the Blytheville-Manilla-Leachville Highway.

Automobile tires, tubes and other rubber products, besides cotton fabrics for these articles, will be manufactured by the Dixie Rubber Co. of Memphis, which plans to invest about \$1,000,000 for its facilities. This company also proposes to buy 1000 acres of Tennessee land and grow cotton for its fabrics mill.

English capitalists organized the Loncala Phosphate Co., Ocala, Fla., with \$1,000,000 capital and purchased 40,000 acres of phosphate land, besides a drying, storing and shipping terminal at Jacksonville. They will build four plants and within three months have a monthly output of 7000 tons of phosphate rock, later proposing two additional works, increasing monthly production to 10,000 tons.

Ready-cut houses and standard fabricated houses, in accordance with a new idea, will be manufactured at Greenville, S. C., by the Minter Homes Co., organized with \$1,000,000 capital. This enterprise is connected with the Minter Homes Corporation of Huntington, W. Va., and its capitalization is \$1,000,000. W. E. Minter is president of both corporations.

Samoset Mills, Talladega, Ala., accepted plans for buildings, machinery and improvements to cost \$1,000,000 for additions to present plant. The additions will include a two-story 303x132-foot weave shed to be equipped with 500 automatic looms.

Multiple piston engines will be built by the Richard Carter Company, Gulfport, Miss., incorporated with \$1,000,000 capital.

Chatham County Commissioners, Savannah, Ga., decided upon building a hard-surfaced highway from Savannah to Tybee, the estimated cost being \$1,000,000.

Blue Buckle Cotton Mills, Rock Hill, S. C., will provide additional facilities to cost \$1,000,000. This company's new machinery will include 1000 looms, its new buildings to include weaving mill with dyehouse and 100 cottages for operatives.

Armour Fertilizer Works, Chicago, engaged engineers and contractors for building a big plant on the waterfront at Baltimore. This plant is for the manufacture of fertilizer, and it is understood that the investment will approximate \$1,000,000.

Sulphuric acid for fertilizer manufacture will be the product of the Union Acid Works, Baltimore, organized with \$1,000,000 capital. This company has a seven-acre site on the waterfront, and its plant will be built in two units with daily capacity of 200 tons of acid. It will build a pier with daily capacity 2000 tons for handling brimstone from Louisiana sulphur mines.

Improvements decided upon for the Loray Mills, Gastonia, N. C., will cost \$1,000,000. They include adding 33,000 spindles, replacing steam power and large electric motors with small electric motors driving machinery in units, constructing steam laundry, building dormitories, etc.

At Mebane, N. C., the Durham Hosiery Mills of Durham will build a 10,000-spindle mill for manufacturing hosiery yarn. This mill will cost \$1,000,000, and the plant will include a complete village community with public utilities.

Organized at Chattanooga, Tenn., the Dixie Mercerizing Co. awarded contracts for the buildings and machinery of a \$700,000 plant. The latter will include a one-story 380x100-foot and a two-story 240x100-foot building of concrete fireproof construction, costing \$300,000, the mercerizing machinery, with its electric-power drive, to cost \$400,000. This Dixie enterprise is composed of a number of Tennessee hosiery knitting mill companies.

At Houston, Tex., the Houston Mill & Elevator Co. will build grain elevator and mill with daily capacity 15,000 barrels of flour. This company has organized with \$600,000 capital, and its plant site is on the Houston ship channel.

Additional buildings, machinery and other accompanying necessities have been decided upon by the Atlantic Steel Co., Atlanta, Ga., about \$600,000 to be invested. These additions will double the company's output of drawn wire, galvanized wire and fencing.

Motor trucks will be manufactured by the Bruce Motor Truck Co., Tampa, Fla., incorporated with \$500,000 capital.

Memphis will have a \$500,000 plant for manufacturing oak flooring and oak trimmings. The E. L. Bruce Company of Little Rock will build this plant and has purchased a 20-acre site for it.

With daily capacity of 1800 dozen pairs of silk hose, the Petersburg Silk Hosiery Corporation has established a plant at Petersburg, Va. This company organized with \$500,000 capital and leased a building in which to install its machinery with electric-power drive and initial equipment costing \$300,000.

About \$500,000 will be expended to build a hotel for women operatives by the Viscose Company, Roanoke, Va. This building will be of fireproof construction and have four floors, with gymnasium, auditorium, library and other facilities for 400 girls. Architectural and building contracts have been awarded. The company is a \$10,000,000 corporation manufacturing artificial silk at Roanoke and at Marcus Hook, Pa.

One hundred barrels of meal and 1500 barrels of flour will be the daily capacity of a plant which the Gladney Milling Co. will build at Sherman, Tex. All contracts have been awarded, and the plant will cost \$300,000.

Municipal paving contracts totaling nearly \$264,000 were awarded at Jacksonville, Fla., for street paving with vitrified brick and granite curb.

Phonograph cabinets will be the product of the Prestonia Manufacturing Co., Louisville, Ky., organized with \$250,000 capital.

Development plans by Crosby Thompson of the Old Dominion Industrial Corporation at West Point, Va., provide for developing 100 square miles of timber land in Camden county, Georgia. This property is estimated to contain 150,000,000 feet of pine and hardwood lumber, which will be manufactured at mills near Woodbine, besides which there will be a company organized to build a sulphate pulp mill. The cut-over lands will be colonized.

An additional mine to be equipped by the Tennessee Coal, Iron & Railroad Co., Birmingham, Ala., will supply fuel for that corporation's industrial activities. This mine will be opened on the Mary Lee seam near Pratt City, and its daily output will be 1000 tons of coal.



# Southern Railroads Organize Association to Promote Development Work

[Special Correspondence Manufacturers Record.]

Birmingham, Ala., April 8.

As a result of a two-day meeting here this week by representatives of the industrial and agricultural departments of the railroads of the South and Southwest, a permanent organization was formed to be known as the Association of Railway Development Agents of the South. This association will embrace in its membership the representatives of any Southern railroad engaged in industrial, agricultural, immigration, colonization or other railroad development activities and, as stated in the constitution adopted, the objects of the association shall be to promote the efficiency and importance of the railway development work in the South, to bring about an interchange of ideas among its members and to co-operate with other authorized development agencies in the South.

Preceding the organization of the association there was a thorough and heart-to-heart discussion by all those attending, and an opportunity was given to everyone to express his views as to whether or not their work in the South would be benefited through an association of this kind. Those attending were unanimous in approving the organization of the association, and all expressed themselves as feeling that through such a body industrial, agricultural and immigration activities could be handled with much greater success because of the opportunities that would be given for a constant interchange of ideas and accomplishments through the association.

In addition to those in charge of railway development work who spoke of the direct value which such an association could be made to them in their efforts, a number of the field men were also present, and touched upon various ways in which they would be assisted and stimulated through attending regular meetings of a body of this kind.

It was planned to have Richard H. Edmonds, editor of the MANUFACTURERS RECORD, address the meeting, but, being unable to attend, he sent a letter on "The South as a Field for Railroad Development Work," which was published in the MANUFACTURERS RECORD of April 8 and was read at the meeting by Wm. H. Stone of the editorial staff of the MANUFACTURERS RECORD, and who also presented some further facts on the opportunities in the South for such work. This address is published elsewhere in this issue. The facts presented were aimed to show the tremendous opportunities which the South offers for industries and agricultural expansion, and how opportune the time is to aggressively undertake this work so as to bring into productivity many of the South's resources that are available for the establishment of such a wide range of industrial activities and for agricultural expansion.

In rounding out the organization it was decided that it would be well to divide its work into several departments so that each class of development work would be in charge of a committee that would give its special attention to each subject during the year. These committees will include the following: Industrial Committee, consisting of the industrial vice-president and four members to handle industrial development; Immigration Committee, consisting of immigration vice-president and four members to handle immigration; Agricultural Committee, consisting of agricultural vice-president and four members to handle agricultural work; Welfare Committee, consisting of senior vice-president and four members to handle welfare work; Publicity Committee, consisting of senior vice-president and four members to handle publicity, and Co-operation Committee, consisting of senior vice-president and four members to handle matters relating to co-operation.

The officers elected were as follows: President, W. L. Henderson, industrial and immigration agent, Southern Railway System, Mobile, Ala.; senior vice-president, Jesse M. Jones, general development agent, Seaboard Air Line Railway Co., Norfolk, Va.; industrial vice-president, T. L. Peeler, industrial agent, Missouri, Kansas & Texas Railroad Co., Dallas, Tex.; immigra-

tion vice-president, W. B. Tucker, agricultural agent, Atlanta, Birmingham & Atlantic Railway Co., Atlanta, Ga.; agricultural vice-president, H. B. Holroyd, agricultural and immigration agent, Louisville & Nashville Railroad Co., Louisville, Ky.

One of the striking features of the meeting was the unity of purpose which manifested itself in all the talks throughout the two-day session, and there seemed to be a general agreement that all this industrial and agricultural work in the South could be much better promoted if those in charge of it would work closely together instead of each one along his own individual line. It was pointed out that, while some phases of railway work are competitive, the best results from development work could only come through co-operation and interchange of ideas and plans.

The annual meetings of the association were set for the second Wednesday in March of each year, with other meetings to be called at the discretion of the president. There is a likelihood, however, that a semi-annual meeting will be held in the fall of each year.

## Committees of Railroad Representatives to Confer on Export Rates for Southern Ports.

Washington, April 9.—[Special.]—A committee representing the Southern railroads has been appointed to confer with a similar committee representing the Eastern carriers in reference to the new export rates granted to put Southern ports on an export rate parity with their Northern competitors.

The chairman of the Southern committee is Lincoln Green, vice-president of the Southern Railway System, and associated with him are W. M. Rhett, general freight agent of the Illinois Central Railway, Chicago; E. A. DeFuniak, general freight agent of the Louisville & Nashville Railroad, Louisville; N. B. Wright, assistant freight traffic manager Central Railway of Georgia, Savannah, and E. T. Wilcox, assistant freight traffic manager Seaboard Air Line Railroad, Norfolk.

The committee is considered a representative one and fully competent to present adequately the case of the Southern ports and railroads.

It is not known here definitely who are the members of the Northern committee, but it is stated that W. T. Stevenson, traffic manager of the Big Four, is chairman.

Mr. Green has been ill, on which account it is understood that he has not yet formulated a program for his committee, nor is it believed that a date for the first meeting has been set.

## 100 Per Cent Better Export Service Out of Baltimore Than Through New York.

W. O. Smith & Co., Inc., Forwarding Agents and Insurance Brokers.

Baltimore, Md., April 9.

Editor Manufacturers Record:

We have just read with a great deal of interest the MANUFACTURERS RECORD of April 1, in which you so thoroughly describe the tendency of Southern shippers to ignore Baltimore in the routing of their foreign consignments in favor of New York, and we want to congratulate you upon the manner in which you are bringing this question to the front, as it is of vital interest to every individual interested in the welfare and development of the port of Baltimore.

We have been actively engaged at the port of New York for the past 54 years as foreign freight brokers, and can therefore accurately judge the qualifications and facilities offered to American exporters by both ports. Since coming to Baltimore, it might interest you to know we have been in a position to give our clients 100 per cent better service than we were ever able to give during our long activities at New York.

If you will but continue to champion the cause of Baltimore as

the logical port for Southern and Middle West shippers, we are quite confident that it will not be long before our claims for recognition are taken seriously by those shippers who are now concentrating their foreign trade at the port of New York.

We remain, dear sirs, with good wishes for your continued success.

W. O. SMITH & Co., INC.,

By F. J. HALEY, Manager.

### **\$6,000,000 in Developments for One North Carolina County.**

Raleigh, N. C., April 10—[Special.]—The company of Ohio capitalists which has put \$6,000,000 into the great enterprise of developing Hyde county, this State, will not only complete the drainage of Lake Mattamuskeet, but also will build a railway to thoroughly open that territory. The rails and the equipment for this railway have been ordered. A State official who arrived today from Hyde says the company is not giving out its route for the railway. Ten years ago a survey was made for a railway which passed through Swan Quarter, the county-seat, and then made a wide curve so as in a general way to follow Lake Mattamuskeet's eastern and northern shore. The company has put in ample capital and is now at work.

As already told, the lake bottom, nearly 50,000 acres, was bought by a company with small capital and a pumping plant built. The capital was too small to carry on the work, and the war was an added handicap. Hyde has for many years been termed "the richest county in North Carolina," by this being meant its inherent richness of soil. It is almost an island, with navigable water on three sides and several canals.

In eastern North Carolina 611,000 acres of land have been reclaimed by drainage. This land is of two types—swamp and cut-over. There yet remain 2,500,000 acres of land of these types available for reclamation. The reclaimed area has enormously increased in value and health conditions correspondingly improved.

### **Will Bore for Oil in South Carolina.**

The First National Bank.

Clio, S. C., April 8.

Editor Manufacturers Record:

In the spring of 1917 Mr. C. H. Jackson was excavating for the placing of a flour mill on his farm three miles from here. At a depth of several feet water trickled into the excavation and small particles or globules were noticed of a greasy substance which, when exposed to the air, burst and spread over the surface, making it greasy and causing a peculiar odor as if of crude oil. Some excitement was created at the time in this section, and visitors came from far and near to see the prospective oil fields. Of those who saw, some were pronounced in their opinion that it was "crude oil"; others doubted, but the State Chemist was called on to make an analysis and pronounced the "specimens as submitted crude oil," reporting the following analysis: Water, 2 per cent; crude burning oil, 69 per cent; gasoline, 3 per cent; heavy oil, 26 per cent.

On receipt of the above analysis excitement was increased and an investigation sought by the State Geologist. The chemist, Mr. Tabor, came down and pronounced the topography against any possible discovery of oil here, and it was so published in the papers. Practically all hope of development or experiment was abandoned. Last winter additional evidences of oil were seen in the same vicinity and a company organized under the name of the Marlboro Oil Developing Co., with offices in Bennettsville, S. C. Prominent business men here and at Bennettsville have taken an interest in the project, and a charter has been secured, machinery purchased and is now being placed, and within 10 days actual drilling will take place.

The franchise is on a tract of 280 acres of land for 50 years. It is located within four miles at the farthest point from this place and about 10 miles from Bennettsville, the county-seat. It is the purpose of the promoters to make a thorough try-out of the property. An experienced driller is in charge of the proposition and is hopeful of striking oil in a new field, which, if it happens, will mean so much for this section.

H. L. GALLOWAY, President.

### **Heavy Construction Program in Tampico District.**

Tampico, Mexico, April 7—[Special.]—An industrial development era that surpasses anything of the kind ever known in Mexico is in progress in Tampico and adjacent territory where oil-producing, transporting and refining operations are being extensively carried on. American and other foreign oil interests are back of this big construction program, which involves the expenditure of many millions of dollars. In many places the tropical wilderness is being reclaimed and occupied as sites for great oil terminals, storage tanks, refineries and other appurtenances of the oil industry.

The latest authoritative announcement of plans for a large construction campaign is that of the International Petroleum Co., which is now making a survey for a railroad to be built from Chirara to Totoca. It is to be paralleled by a pipe line of the same size as the one which the company has under construction from Los Naranjos to Chirara. Each line will have a daily capacity of 40,000 barrels of oil. Each sea-loading rack will have a capacity of 2000 barrels per hour. The gross pumping capacity at the station at the terminal will be 260,000 barrels a day.

The railroad across the terminal at Mata Redonda is completed and everything is in readiness to rush the work as speedily as materials arrive.

Twenty-four 55,000-barrel tanks will be erected at Mata Redonda; also, four sea-loading racks. All this construction work will be done in close proximity to the terminal. The terminal itself will have a sewerage and water system of very latest modern design, and will be up to date in every respect in regard to sanitation.

At Cuesillos a freight terminal for the handling of material and freight at the Amatlan pump station at the well will be erected. The terminal will also be used for getting drilling material to the drilling operations speedily.

At Mata Redonda 48 cottages will be built for Mexican employees. Twenty-four five-room houses will be erected for the foreigners. A clubhouse of the most modern type will be built. Mess halls, the number of which is as yet undetermined, Chinese quarters and office buildings are included in the plans, as are also several large store buildings, warehouses, school building and modern public utility plants.

All of the buildings at Mata Redonda will be of the most substantial construction, the material being brick and concrete.

Patrick M. Longan, comptroller and general manager of the company, with offices here, is in charge of the improvements.

### **Material Handling Machinery Manufacturers Elect.**

At a meeting of the directors of the Material Handling Machinery Manufacturers' Association, held in New York recently, the following officers were elected: President, Charles F. Lang, president Lakewood Engineering Co., Cleveland, Ohio; vice-president, Rumsey W. Scott, Otis Elevator Co., New York; treasurer, Lucian C. Brown, general sales agent Elwell Parker Electric Co., New York; secretary and manager, Zenas W. Carter, New York City, N. Y.

The above with the following constitute the executive committee: Fred Stadelman, Eastern manager Wellman-Seaver-Morgan Company, Cleveland, and William F. Merrill, president The Lamson Company, Boston, Mass.

All the above with the following constitute the board of governors: F. W. Hall, commercial manager Sprague Electric Works, New York; H. W. Standart, secretary-treasurer Northern Engineering Works, Detroit, Mich.; J. C. Walter, Alvey Ferguson Company, Cincinnati, Ohio; D. V. Jenkins, Watson Elevator Co., New York; Roy G. Owens, vice-president Lakewood Engineering Co., Cleveland, Ohio; Thomas Robins, president Robins Conveying Belt Co., New York; G. O. Halmsteadter, sales manager Hyatt Roller Bearing Co., New York, and C. W. Miller, secretary-treasurer Jeffrey Manufacturing Co., Columbus, Ohio.

Additional companies elected to active membership were: Whitings Foundry & Equipment Co., Harvey, Ill.; Motors Terminal Co., Cleveland, Ohio, and C. W. Hunt Co., Inc., West New Brighton, New York.

## Big Extensions Planned for Medina River Dam and Irrigation System.

San Antonio, Tex., April 7.—[Special.]—G. Trafford Hewitt of London, England, president of the Anglo-American Corporation, which is largely interested financially in the great Medina River dam and irrigation project near here, has just made a personal inspection of the property. It is reported that as a result of his visit the irrigation system will be extended and a much larger acreage brought under cultivation than is now embraced in the system.

The Medina project was conceived and accomplished by a British syndicate, headed by the late Dr. F. S. Pearson of the Pearson Engineering Construction Co. of New York and London. Besides forming a reservoir that holds a water supply sufficient to irrigate an enormous scope of rich valley country, this artificial lake has become one of the most famous pleasure resorts in the Southwest. It is visited each year by thousands of persons who are seeking outdoor enjoyments, such as fishing, boating, swimming and hunting. It is the largest inland body of water in Texas.

The watershed feeds the lake and supplies the river with a total area of 690 square miles. The average rainfall in the watershed of the Medina is 24 inches a year, giving a supply of 883,000 acre feet of water. The grand total supply of 994,000 acre feet, with 12.57 per cent run-off factor. Leakage and evaporation, it is estimated, reduce the supply of water 36,000 acre feet a year.

There are three dams supporting this system of impounding and facilities for irrigation and water-power. These are built in succession of proportionate strength and size, each creating an individual lake, the smallest of the three being located several miles downstream, from which issue irrigation canals and laterals. The second dam also supports canals and laterals for irrigation. The main dam, the Medina, holds the upper lake, feeding the two lower lakes and reservoirs by means of spillways when water is high and by means of locks and issueways when water is low.

The main dam is a great engineering feat; likewise, one of the largest dams in the country. The Medina lake spreads back into the hills and mountain ranges for nearly 20 miles, a serene and mirror-like body of water, portraying in its clear depths towering peaks and world-old crags.

The Medina lake is fringed with native cedar and oak forests, growing dense at the water's edge and stretching back up the hills and mountains in scraggly, disappearing patches. Spectacular scenic wealth spreads its charm over the high country, which hems in, cradle-like, this great body of water.

The main dam is 128 feet wide and 1580 feet long. Its height is 180 feet. It is equipped with all known modern machinery and appliances for letting water pass in gradual quantity into the secondary reservoir through one or all of three discharge pipes five feet in diameter. This dam impounds 254,000 acre feet of water, forming a lake covering 6026.78 acres of land at normal stage. The lake is 152 feet deep at the dam, and the depth decreases upstream at the average rate of 10 feet a mile. The lake at average level is 10 miles long, and averages  $1\frac{1}{2}$  miles in width. It has a shore surface of 93 miles at spillway level.

The flood waters in excess of reservoir capacity flow over a spillway 882 feet in length to granite boulders and a canyon 100 feet below and into the secondary reservoir. The capacity of the main reservoir or lake can be increased 46,830 acre feet by construction of a concrete elevation across the spillway eight feet in height.

Estimated on the basis of one acre foot of water per acre during each year, 60,000 acres can be irrigated from the lake as it now stands. The average can be increased to 100,000.

The diversion dam, or second dam, is 52 feet wide, 440 feet long and 80 feet in height. It is 50 feet above the river bed. It likewise is equipped with machinery to let water pass into the canal through one or more of five discharge gates 5x7 feet. This dam impounds 3900 acre feet of water, forming a lake covering 202 acres of land. This lake is 50 feet deep at the dam, its depth decreasing with the fall of the river, which averages 12 feet a mile through the canyon. This lake is four miles long and averages one-tenth of a mile in width. It has a shore surface of 10 miles at discharge level.

The flood waters in excess of the reservoir capacity flow over the diversion dam into the river bed.

The Chicon, or third dam, is 16 feet wide, 466 feet long and 27 feet high. It is equipped with machinery for storage purposes, with gate and reinforced concrete pipes to let water into the secondary canal for irrigation and water-power purposes. This dam impounds 663 acre feet of water, forming a lake covering 134 acres of land. The lake is 22 feet deep at the dam and has a shore surface of 6.16 miles at discharge level. Floods in excess of the reservoir capacity flow over the spillway and into the river bed.

The distribution of water for irrigation is by laterals and canals. The main canal begins at the diversion, or second dam. It is 24 miles long, and has a capacity at syphon No. 1 of 850 cubic feet per second. Below, at syphon No. 2, the canal is 15 feet wide and 9.8 inches deep, and has a capacity of 600 cubic feet per second. It is constructed of concrete syphons, metal flumes, rock and earth excavations. The earth portion of the canal is 15 feet wide and 12 feet deep.

In all there are 50 miles of laterals and ditches leading from the main canal over lands irrigated therefrom.

The principal crops produced on the irrigated lands are cotton, corn, grains, rice and garden truck of all kinds.

At the present time 10,000 acres of company lands and 2500 acres of foreign lands have been brought under irrigation. There are 6000 acres of company lands now being cleared for cultivation and irrigation. A late estimate shows that 30,000 additional acres of land can be added to the acreage now under irrigation by the construction of 140 miles of laterals. Large areas of highly yielding agricultural lands adjoining the irrigated lands can be put under irrigation and served from the Medina lake. Most of these lands lie in the Medina River bottom country, extending at increasing lengths as the stream winds its way out of the hill country toward the southern level lands.

There are at the present time three companies owning holdings in the irrigated area. They are the Medina Townsite Co., 2385.98 acres; Medina Valley Irrigation Co., 1910.49 acres, and the San Antonio Land and Irrigation Co., 46,486.72 acres.

Considerable improvements have been made at designated sites along the stream. At the townsite of Natalia a hotel costing \$20,000 has been constructed. The town has water-works, drainage, power-house and ice plant. The other sites are Pearson, Kirk and Macdonald.

The actual acreage under irrigation in 1919 was: Company lands, 8352.47; foreign lands, 2377.50.

The total cost of the Medina dams was \$3,499,180.45. This is the cost of the three dams built for the mammoth irrigation system conceived by the promoters. The cost of the main dam was \$2,550,649.25.

The power possibilities of this system are very great, although nothing has yet been done to develop power.

## Large Construction Contracts Pending in Uruguay.

Some big contracts will probably be let for construction work in Uruguay within the near future, according to a report just published by the Bureau of Foreign and Domestic Commerce. Fifteen cities expect to install modern sewerage and water-supply systems; an international hydro-electric power plant on the Uruguay River is contemplated; an experimental irrigation scheme is in prospect; workmen's homes, factories and Government buildings to the extent of about \$40,000,000 will probably be constructed during the next few years in Montevideo. Details concerning the imported materials and construction machinery needed for these and minor works are set forth in this report on "Construction Materials and Machinery in Uruguay," which may be secured for a nominal sum from the Superintendent of Documents, Washington, D. C.

## Japan Buying Spinning Machinery in Philadelphia.

Japanese manufacturers of knit goods are now buying cotton-spinning machinery from Philadelphia mills. They are purchasing machinery that is already in use because they can get it more quickly; and they are paying big prices for it. Difficulties with labor which prevent American manufacturers from getting a full day's work for a full day's pay is ascribed as the chief reason for the willingness to sell the machinery and close their plants.



### Knoxville Gay Street Viaduct Nears Completion— Will Form Link in Dixie Highway.

Knoxville, Tenn., April 9—[Special.]—The concrete viaduct over the Southern Railway tracks on Gay street is nearing completion. The big fill on the south side is rapidly being filled with sand and gravel and the street-car tracks gradually raised to the level of the structure. The work was begun on July 9, 1919, and if it is completed on schedule time traffic will be resumed within a week or two. The new viaduct will have a 2½ per cent grade, the old grade being 7½ per cent. The two approaches will have a grade of 6 per cent, while the grade of the long approach from Vine avenue will be only 2¼.

The length of the viaduct proper, from Depot to Jackson avenue, will be 500 feet; the main approach, from Jackson to Vine, 450 feet, and each of the Jackson-avenue approaches 300 feet, making the entire length of the structure 1550 feet. Width of viaduct, 53 feet, with 10-foot sidewalks against a 28-foot structure with 8-foot sidewalks in the old.

Amount of concrete used in main viaduct was 5000 cubic yards, the amount of steel for reinforcement 800,000 pounds, sand and gravel for main approach 8000 cubic yards; total weight of structure, complete, 21,500,000 pounds.

There are 17 spans of varying length from 19 to 38 feet. The bents consist of five columns each supporting the beams on the main viaduct. These bents are supported on a beam footing full width of the bridge, five feet wide and two feet thick.

The work was done by the ordinary method of mixing by steam power, the product carted to the different forms by two-wheel carts. At the south end of the viaduct the cement was carried to a 90-foot tower and there flowed by gravity to the forms that could not be reached by the ordinary process. Where the retaining walls were placed and the sidewalks to be built along the main approach, an immense driver was used of the Raymond type to drive piles to a distance of from 30 to 35 feet in depth. A big steel core, encased in a cylindrical metal casing, was driven at a penetration of one-fourth inch to a blow from a 10,000-pound hammer. When the distance was reached the core was released and withdrawn, leaving the hollow cylinder, which was then poured with cement. This supported the foundations of the retaining walls and sidewalks of the approaches, and fitted to these were the buttress type of retaining walls to hold the immense amount of sand and gravel for the space between. Asphalt over a six-inch concrete base will be used as a floor cover on main viaduct, rough bricks on approaches.

The old bridge was removed by power from the railroad, which set cars directly underneath and, when ready, hauled them away. This without any accidents or loss of time by the trains running on the main lines.

The estimated cost of the viaduct is \$250,000, with an estimated abutting property damage of \$100,000. The floor of the new structure will reach between the first and second stories of the business houses facing the viaduct, and these will all be remodeled to conform to the new grade.

The design of the viaduct was made by W. B. Crenshaw; the work superintended by L. W. Frierson, constructing engineer; contract awarded to M. C. Monday, and construction work for contractor superintended by William Heer.

Cement used, Dixie Portland; sand and gravel from the Tennessee River; steel used in the structure from Knoxville Iron Co.; labor from Knoxville, and designs and engineering work of Knoxville engineers, so that the structure when complete will stand as a monument to "home products."

### Penn-Mary Coal Co. Improvements.

An expenditure of \$1,000,000 on its various plants this year is proposed by the Penn-Mary Coal Co., which succeeds the Elkins Coal & Coke Co. and is a subsidiary of the Bethlehem Steel Corporation. There are seven mines in Monongalia and Preston counties, West Virginia, which the Penn-Mary corporation is operating with annual capacity of 750,000 tons, and engineers' plans will provide for an ultimate increase of its output to 1,500,000 tons of coal. During the past several months the company has completed various improvements and installed new equipment, which includes locomotives and mining machinery.

### Mexico Using Aeroplanes for Mail—England Developing Its Trade With Mexico.

Queretaro, Mexico, April 8—[Special.]—It is planned by the Mexican Government to establish airplane mail routes throughout the country and to do away almost entirely with the present method of transporting the mails by railroads. It has not yet been fully determined whether the airplane mail service shall be done under contract or by Government-owned and operated machines. An English syndicate has submitted a proposition to perform the proposed mail-carrying and distributing service, furnishing its own airplanes and aviators, and the matter is now under consideration by Andres Garcia, Postmaster-General. Francisco R. Villavicencio, Mexican consul-general in London, England, who arrived in the City of Mexico on vacation recently, brought with him details of the plan of the English syndicate for establishing and maintaining mail routes in this country. He submitted the proposition in all of its details to Mr. Garcia.

The scheme provides for three main aerial routes between the City of Mexico and Juarez, passing over Aguascalientes, Torreon and Chihuahua; between the City of Mexico and Laredo, Tamaulipas, with stops in Queretaro, San Luis Potosi and Monterey, between the City of Mexico and Tampico, passing over several cities, among them Pachuca, and between the City of Mexico and Vera Cruz, with stops in Toluca and Puebla. It is believed that only 6½ hours will be necessary to make the trip to both Juarez and Laredo from the City of Mexico. For the other two terminals, Tampico and Vera Cruz, 2½ will be enough, it is estimated. The personal fare would amount to 300 pesos to Juarez or Laredo and 150 to Tampico or Vera Cruz, passengers having the right to carry with them, free of extra charge, baggage weighing no more than 30 pounds.

The big English concern which is contemplating establishing such a service is ready to spend more than \$2,000,000, according to Mr. Villavicencio, who says he is commissioned by the company to make arrangements with the Mexican Government. Planes of the very biggest type would be used, with a capacity of 14 passengers.

Referring to conditions of actual political relations between England and Mexico, Mr. Villavicencio said that every day they were becoming more cordial, and English concerns and business men were preparing themselves to come after the Mexican market.

"England is specially interested in Mexican raw materials," the consul remarked, "and I am sure 75 per cent of importation articles that England needs can be secured in Mexico, and it is well known that importation means everything for Englishmen, as they do not produce raw stuffs in any worthy amount."

The tide of English trade is beginning to be felt in Mexico, and a large amount of propaganda literature is being spread all over the country. One of the most important features of the English commercial offensive now being waged is that referring to the sales credit system, which enables the Mexican merchant to secure the goods he needs without paying cash for them. British concerns are actually granting a six months' credit and are doing much in regaining this market for them. People here recall the fact that this credit system was practiced before the war gave a hard blow to European trade in Mexico, along the same lines, which proved to be the best for the holding of the Mexican market.

### A Good Record for Alabama Buyers of Liberty Bonds

Gulf States Steel Co.

Birmingham, Ala., March 31.

Editor Manufacturers Record:

In reply to your letter of March 27, from my familiarity as member of the executive committee of the American Trust & Savings Bank of this city I am in a position to say that the people who subscribed for Liberty bonds have practically paid for them. We have never pushed anyone who bought the bonds on time through the bank, and have been exceedingly patient and helpful, offering always to lend people money on Liberty bonds rather than have them sacrificed by reselling below par. Nevertheless, our loans on Liberty bonds have shrunk down to probably 2½ per cent of what they were two years ago.

JAMES BOWRON, President.

## Problems of Vital Importance to the Whole Cotton-Growing and Cotton-Marketing Industry Discussed at Montgomery Convention of American Cotton Association.

Due to a strike affecting the binders in the printing office of the MANUFACTURERS RECORD, it is necessary to send the paper to press one day earlier this week, and hence any extended comment on the proceedings of the Convention of the American Cotton Association, in session at Montgomery, will have to be deferred until next week.

The meeting is from April 13 to April 16. The program on the morning of the opening day includes Gov. Thos. E. Kilby's address of welcome to the State and Mayor W. A. Gunter, Jr.'s address of welcome to the city. The response to these addresses is by J. J. Brown of Georgia, after which Mr. Wannamaker will deliver the president's address. National Campaign Director Harvie Jordan of Atlanta is scheduled to give his report at this morning meeting also; then comes the appointment of the Committee on Resolutions and the general committees and miscellaneous announcements.

The program for the afternoon of the first day includes the following:

"Safe and Sane Farming," by Dr. Bradford Knapp, president of A. and M. College, Fayetteville, Ark.

"Are Not the Members of the American Cotton Association at This Time Very Improvident? If So, Why Longer Procrastinate?" by W. G. Turner of Memphis.

"The Evils of Speculation in the Cotton Industry," by Senator B. B. Comer of Alabama.

"Cotton Statistics of the Census Bureau," by Director Sam L. Rogers of the Census Bureau, Washington.

After each of these addresses an allowance of 30 minutes will be made for five and ten-minute speeches by the delegates on the subjects discussed.

In the evening the convention will be addressed by Senator E. D. Smith of South Carolina on "New Conditions Confronting the South." D. S. Murph, Department of Agriculture Specialist in Cotton Warehouses and Markets, will speak on "The Functions of the Warehouse in Local Cotton Marketing."

The Wednesday morning session will include addresses by C. A. Evans, Chief of Bureau of Extension Service, Washington, on "Necessity for Diversification"; Dr. W. D. Hunter of the Federal Horticultural Board, on "The Pink Boll-worm"; Gov. W. P. G. Harding of the Federal Reserve Board, on "The Marketing of Crops," and Senator Jos. E. Ransdell of Louisiana, on "Economics of High Density Gin Compression."

The women's session will occupy the Wednesday afternoon period, this session being presided over by Mrs. Z. I. Fitzpatrick of Madison, Ga. Mrs. Belle A. Ross of Montgomery will deliver the address of welcome. Mrs. Samuel Lumpkin of Atlanta will discuss "Thrift in the Home," and Mrs. J. H. Mathis of Alabama will talk on "Women as Landowners and Producers of Cotton." At this same session Wm. H. Knox of Arizona will discuss the "Farm Labor Problem."

Addresses for the evening session are as follows:

"Estimating the Cotton Crop," Leon M. Esterbrook, Chief Crop Reporting Bureau, Washington.

"Organization a Necessity for Cotton-Growing Interests," Col. W. B. Thompson, New Orleans, La.

"Friendship Between the Southern Cotton Growers and Northern Wool Growers," W. W. Reynolds, Utica, O.

First on the program Thursday morning is an address by Senator Hoke Smith of Georgia on "Economic Marketing of Crops," followed by Senator Robert L. Owen of Oklahoma on "Our Banking System" and Harry D. Wilson of Louisiana on "Warehousing Farm Products." Dr. B. S. Kilgore, Director Extension Service, Raleigh, N. C., will discuss "Uniform State Warehouse Laws."

The Thursday afternoon session will include addresses by Congressman J. Thos. Heflin on "Organization Essential to Maintain Fair Prices for Cotton"; Nathan Adams of Texas, on "The Banker's Position in the American Cotton Association," and J. R. Alexander, president Arkansas Division of American Cotton Association, on "Co-operative Marketing." Mr. John B. Cannon

of Spartanburg, S. C., will talk on "Spartanburg County Association," followed by Col. Stanford Arnold of Georgia on "Coweta County Association," then the committee reports.

The evening address by Gov. R. G. Pleasant of Louisiana will be on "The American Cotton Association," and this will be followed by other addresses by the Governors of Georgia, South Carolina, Alabama and North Carolina and other visiting Governors.

The final session on Friday will be addressed in the morning by Prof. J. A. Todd of Manchester, England, on "The American Cotton Growers from an Englishman's Viewpoint." After Professor Todd's address will come the committee reports, and in the evening session will be held the election of national officers.

The entire conference will be devoted primarily to the business of the association, and speakers will be requested to confine their addresses to a length of 20 minutes. The tremendous importance of the whole cotton growing, cotton financing and marketing question and the international importance of the staple is such that the proceedings of the Montgomery Convention will be watched with close attention not only by the cotton men of the South, but cotton manufacturers throughout the country and in Europe.

The American Cotton Association was organized in May, 1919, at New Orleans, where delegates were present from every cotton-growing State in the South. J. Skottowe Wannamaker of St. Matthews, S. C., was at that time elected president. In September of last year the next regular meeting of the association was called at New Orleans in order to recommend a minimum price on the 1919 cotton crop. An active part was taken by the officials and members of the association in the proceedings of the World Cotton Conference held in the same city in October. State divisions have now been organized in all of the cotton-growing States. Thousands of active members have been enrolled.

As repeatedly emphasized in recent months, the object of the American Cotton Association is to insure for the growers at all times a price for cotton which will give them a reasonable profit upon the cost of production. The purpose, further, is to bring about modern methods in the baling, storing, handling, financing and marketing of the cotton crop. Particular stress has been laid upon the necessity for ample warehouse facilities to provide for safe storage of the staple until such time as it may be profitably marketed, thus regulating the supply to legitimate consumption demands and minimizing the evils of cotton speculations. The association is endeavoring to bring about conditions which will provide better homes and greater comforts for the cotton farmers, and to do away, as far as possible, with the necessity for the labor of women and children upon the farms of the South. This program includes the reduction of illiteracy by securing better schools, better churches and better highways.

### Nearly \$300 an Acre for Arkansas Bottom Land.

Memphis, Tenn., April 5—[Special.]—Delta or bottom land in Arkansas was sold for nearly \$300 an acre when S. A. Person disposed of his 580-acre plantation, 18 miles from Memphis, to H. B. Seawell of Coahoma, Miss., for more than \$150,000. Prather McDonald, Memphis attorney, has paid \$180,000 for 1500 acres of delta farm lands in the vicinity of Belen and Batesville, Miss., and will develop the property, where nearly 400 acres are already in cultivation.

### Texas Leather Products Manufacturing.

Leather novelties to include advertising calendars will be manufactured from Texas raw material by the Dallas Art Novelty Co. of Dallas. This new enterprise has been organized with a capitalization of \$1,000,000, and its plans will provide for a \$200,000 factory as the first unit. Officers announced as follows: Charles Hawley, president; O. N. Leslie, vice-president; Charles A. Burke, secretary; George E. Vickers, treasurer and sales manager.

### Unions Liable for Breach of Contract, Says Court.

New Orleans, La., April 12—[Special.]—That unions are liable for breach of contract was the decision of Judge Foster of the Federal District Court in New Orleans recently in awarding damages to the Holland-American Steamship Line against the Stevedores and Longshoremen's Protective Union Benevolent Association.

The wage scale agreed upon by both union and shippers provided for 80 cents an hour, straight time. Certain articles of commerce called for a 90-cent rate.

On December 17, 1919, the steamer Amsteldijk arrived at New Orleans, partly loaded with kainit in bulk. The longshoremen demanded 90 cents an hour to unload her, although kainit is one of the articles that falls within the 80-cent rate. The men refused to work the ship, although the presidents of the white and colored unions made some effort to get them to do so. It was not a strike, but the well-known "individual action."

The steamship company refused the demand, and the men quit. The boat was delayed in her unloading for seven days, after which time had elapsed the men returned to work at 80 cents. The company estimated the loss, based on the current rate of charter, at \$18,423, and sued the unions for that sum.

The unions contended that the contract is unilateral; that the company is not required to send ships to New Orleans to give work to union men, and that the union is not required to furnish any labor at all; furthermore, that the union cannot be held responsible for the individual action of its members.

Judge Foster, however, resolved that the union is responsible, and awarded the company \$500 damages. This represented the difference between the 80-cent and the 90-cent rate, which would have represented the company's loss had it been forced to the men's demand.

In employment circles the decision is considered a victory over the union. The fact that the award will probably never be collected, the union not being incorporated, is not causing anybody any worry. The case was pushed for its moral effect.

### Building Globe Shipyards at Baltimore.

With all details determined and practically all contracts awarded, the Globe Shipbuilding & Dry Dock Co. of Maryland is building its shipyards on the waterfront at Baltimore. This \$5,000,000 corporation was organized several months ago with B. C. Cooke as president, and its facilities will include an 8000-ton dry dock purchased from the Savannah (Ga.) Dry Dock & Repair Co. President Cooke writes to the MANUFACTURERS RECORD:

"Our officers include C. T. Williams, vice-president; Geo. E. Probest, Jr., treasurer, and F. A. Miller, secretary. Dimensions of plant site 30 acres. Buildings as follows: Office, 50x150 feet, 1½ stories, frame, erected by ourselves; mold loft, 50x100 feet, one story, steel construction; joiner shop, 50x150 feet; power-house, 30x110 feet; plate and angle shop, 450x60 feet, erected by Bancroft-Jones Company, Buffalo; machine shop, 365x140x50 feet high, steel construction, erected by McClintic-Marshall Company, Pittsburgh. Architect for buildings is C. Danielsen, naval architect. The machinery to be installed will be modern in every respect. It is impossible at this time to give cost of buildings or equipment or of machinery. The character of construction and tonnage of vessels to be built is all steel 9000-ton cargo vessels. The number of men the initial plant will employ will be from 1000 to 2000."

### Bituminous Coal Production.

Preliminary estimates by the United States Geological Survey place the output of soft coal during the week ended April 3 at 9,858,000 net tons, a decrease of 11.5 per cent when compared with the preceding week.

The total production of bituminous coal during the coal year just ended is estimated at 487,000,000 tons, as compared with 504,100,000 tons in the pre-war year 1916-1917. The decrease was, of course, caused by the great strike of last November. Production since January 1, 1920, however, compares favorably with the record of even the war years.

It now amounts to 140,600,000 tons, and is 29,400,000 tons ahead of 1919; 900,000 tons ahead of 1918, and within 1,850,000 tons of the record of 1917.

### Mexican Laborers Continue to Pour Into Texas.

Monterey, Mexico, April 3—[Special.]—Instead of showing any decrease, the exodus of Mexican laborers from this country to the United States is increasing. Not only are the passenger trains leading to border points filled with men, women and children of the lower class, all imbued with the idea that fabulous wages await them in Texas and other parts of the United States, but along the rights of way of the railroads are continuous streams of these people. In many communities, even as far south as Queretaro, several hundred miles from the Rio Grande, so many of the laboring class have left that farms, ranches and industries generally are feeling the shortage of available employes. The situation is so acute that the ranchmen and agriculturists of several States held a meeting recently in the City of Mexico for the purpose of devising ways and means of putting a stop to the emigration of laborers to the United States. Officials of the Department of Industry and Commerce and the Department of Agriculture of the Mexican Government attended the meeting, and various plans were discussed as to how to overcome the conditions that now affect the so-called peon element of Mexico. It was stated that, notwithstanding a proclamation had been issued by President Carranza urging these native laborers to remain in this country, little observance was being given to the request. It was decided at the meeting that the wages upon the farms and ranches should be materially increased, with a view of attracting men to that character of employment.

An interesting phase of the situation is the announcement by L. M. Lamar, manager of the Rosita, Agujitas and Rio Espondido coal mines, all situated in the northern part of the State of Coahuila, that he has employment for 1000 Mexican laborers, and that he will pay \$1 to \$1.50 American money per day for the inexperienced miners and \$1.50 to \$2.50 American money a day to experienced miners. He offers to pay the transportation of laborers from any point in the States of Nuevo Leon or Coahuila to the mines.

An encouraging feature of the labor situation in Mexico is that wages are beginning to show a marked increase over what they were a year or more ago. This general raise of wages is said to have had its origin in the Tampico oil fields, where American companies have been paying their employes two or three times higher wages than was paid by Mexican-owned industries in other parts of the country. Knowledge of the good wages paid in the Tampico oil region spread to other parts of the country, and gradually brought about a betterment in the wage scale in practically all of the industrial centers of Mexico. It is in the small communities and upon the ranches and farms that the old starvation wage of 30 to 50 cents a day Mexican money is still paid. It is from these places that the principal supply of laborers who are now going to the United States come.

### \$2,000,000 Ship Repair Plant Begins Construction of Third Dry Dock.

New Orleans, La., April 12—[Special.]—The Jahnecke Dry Dock and Ship Repair Co., the \$2,000,000 plant that opened in New Orleans in December, 1919, has begun work on a third drydock, the same to be of 6000 tons lifting capacity. The plant already has drydocks of 10,000 and 6000 tons lifting capacity. The new dock was rendered necessary by the increase in business.

Ernest Lee Jahnecke, president of the company, points out that all the business handled at the plant is new business. It has not been taken away from other drydocks of New Orleans, but is practically restricted to vessels over 4000 tons, the limit of the other drydocks. This business formerly went to Eastern ports. About 50 ships have been handled since December, and each ship in drydock means at least \$5000 to the plant, 75 per cent of which goes in wages.

### Large Gypsum Deposits to Be Developed.

Sweetwater, Tex., April 10—[Special.]—The recent purchase by the United States Gypsum Co. of Chicago of a tract of 200 acres of land two miles east of here, upon which enormous deposits of gypsum are located, is the first step toward the establishment of large mills upon the property for the purpose of utilizing the raw product. It is stated that the work of developing the gypsum beds will be started as soon as the necessary machinery can be installed.



## Increasing Trade With Orient Making New Orleans a "Pacific Port."

New Orleans, La., April 10—[Special.]—New Orleans is 1400 miles from the Pacific Ocean via the Panama Canal, yet New Orleans is becoming a "Pacific port." It is 3000 to 4000 miles further from China and Japan than San Francisco and Seattle, but it is getting business direct that in former years was relayed from the California ports.

In December, 1918, New Orleans was opened to the Eastern trade just as Japan was opened to the Western in 1854. Prior to the clearing of the Panama Maru in December, 1918, a full-powered steam vessel had never cleared from New Orleans via the Panama Canal for the Orient. Now there are five or six vessels a month doing this—vessels of 5000 to 10,000 tons—and they are loaded with the products of the Mississippi Valley.

There are two lines operating vessels in both directions, to and from the Orient, coming into New Orleans from Singapore, Hongkong, Shanghai, Tsin Tau, Yokohama and Kobe with the products of the East. Some of the ships come to New Orleans via South America, from which region they bring huge cargoes of coffee.

The first liner service was established by the Osaka Shosen Kaisha, of which the J. H. W. Steele Company are the New Orleans agents. A new liner service will be established shortly, with the arrival of a steamer of the Toyo Kisen Kaisha, also handled by the Steele Company. The Shipping Board has vessels plying between New Orleans and the Orient, and other lines having occasional service are the Trans-Oceanic, Mitsubishi Goshi Kaisha, Norton Lilly, The Globe Line, Tracey Steamship Co. and Standard Oil Co.

Why is it that New Orleans is competing so successfully with the California ports? Because the Orient uses many Southern and Mississippi Valley products—cotton, naval stores, iron and steel, zinc, glass, carbon black, petroleum and such manufactured articles as autos, trucks, machinery and agricultural implements. And because the Valley consumes gunnies, burlaps, jutes for sacking our grain and baling our cotton, hemp for binder twine, matting, vegetable oil, rubber, tea, spices, silks, Oriental manufactures—in fact, all the diversified products of the East.

Steamship service between New Orleans and the Orient has just started, and there is room for liner service to Australasia, Dutch East Indies, British India, Manchuria and Vladivostok. There is no reason why New Orleans should not have steamer service to every point in the East now reached by New York steamers, because New Orleans is 60 miles closer to the Orient than New York.

Each of the Oriental ships that comes into New Orleans leaves in wages, repair bills, fees and for fuel and stores about \$60,000. Sixty ships a year means \$3,600,000 in new cash to the port. This does not take into consideration the additional handling profit on the goods imported and exported between shipside and point of consumption and origin. The total trade of the United States with the Orient is \$2,000,000,000 a year. New Orleans, becoming a Pacific port, has tapped that trade.

## How High Interest Rates Work Against the Liberty Bond Buyer.

The Georgia National Bank of Athens.

Athens, Ga., March 31.

Editor Manufacturers Record:

I have received a copy of the reprinted bankers' letters which appeared in the MANUFACTURERS RECORD of March 25, which I have read with much interest.

Our people all over the country were made promises in connection with the purchase of the Liberty issues, and I agree with you that these promises should be faithfully kept, certainly in those cases where no advantage is being taken of the situation and honest efforts are being made toward proper and orderly liquidation.

As I see it, the resultant effect of the Federal's increased interest rates has been to throw large sums of these issues on the market, causing large declines in values, but same has not operated far to deter the fellow whose profits are large. The bondholder with the low-interest yield cannot "stand to" without a further loss, while it is not much concern to the fellow with the large profits whether his interest rates be 1 or 2 per cent greater or not.

JOHN J. WILKINS, President.

## Must We Carry Europe's Debt and Pay Our Own Now in Cold Cash?

JOHN SEVIER ALDEHOFF, Dallas, Tex.

Hon. David F. Houston, Secretary of the Treasury, has recommended to the Congress that the excess profits tax should be repealed or amended, but not now.

The Treasury Department will fund the \$10,000,000,000 loan to the Allies, a creditable and just decision. The Federal Reserve Board says subscribers to Liberty and Victory bonds must pay right now or lose from 8 to 10 points on the best security ever offered. It is determined and has ordered that all speculation (?) shall end, and it intends to end it by raising rates of interest and contracting credits. Ostensibly the purpose is to deflate prices, but the manufacturer and the merchant alone can deflate prices; the bank can deflate credits and destroy all business.

Must all the aims of all the people who sought by redoubling their efforts to make an extra dollar to meet increased cost of living, be thwarted by official decree and from a pre-war basis of income meet also their pro rata of enlarged governmental expenditures and waste?

Are the people of the United States to be less favored than those of Europe and be forced to carry Europe's debt in funded bonds but pay their own entire war debt in cold cash now? While the purchasing power of the pound sterling rises, the purchasing power of the American dollar steadily declines. Where are our statesmen?

## Efficiency 20 Per Cent Off, Cost of Living 108 Per Cent Higher, Wages 260 Per Cent.

The Matthew Addy Company.

Cincinnati, O., April 8.

Editor Manufacturers Record:

In regard to the efficiency of labor: One of my friends told me the other day that he had made a careful calculation of how things were going in a large foundry at Bridgeport. The men are receiving in that foundry high wages. They are buying \$800 for coats and that kind of things. The efficiency of labor, man for man, is now 80 per cent as against 100 per cent four years ago. A survey made by the manufacturers of Bridgeport shows that living now against 1915 was 108 per cent higher, and wages were 260 per cent higher.

JAMES A. GREEN, President.

## Large Delta Farms Change Hands.

Memphis, Tenn., April 10—[Special.]—Clear Lake Plantation, in Mississippi county, Ark., one of the finest improved delta farms in the Arkansas delta region, has been sold by the owners to E. P. Davis and Cook & Redding of the Bank of Hernando, Miss., for \$230,000. The property embraces 1475 acres, 1200 cultivated now. The transaction was practically a cash one.

C. B. Frazier of Memphis has sold his 557-acre tract in Eastern Arkansas, near Riceville, to Harry Sewell of Coahoma, Miss., for \$150,000. Mr. Sewell owns hundreds of acres in the Mississippi delta, and will use his Arkansas property largely for the growing of corn, which yields with ordinary attention from 75 to 100 bushels an acre in Eastern Arkansas delta soil.

## \$350,000 Building for Farm Implement Manufacturer

Memphis, Tenn., April 10—[Special.]—B. F. Avery & Son, manufacturers of farm implements, with a Louisville factory of 35 acres, have bought a site on South Main street and will this year erect a seven-story building costing \$350,000, which will be used largely as a distributing station to the rapidly growing agricultural region of which Memphis is the hub.

## Factory for Automobile Trucks at Greenville, Miss.

Memphis, Tenn., April 9—[Special.]—The Churchill Compress, at Greenville, Miss., has been bought by the Menges Motor Truck Co. at a figure said to be \$100,000. The big plant will be made into a plant for the manufacture of Menges automobile trucks, with a capacity of 2000 yearly.

## THE IRON AND STEEL SITUATION

### Large Gains in Steel Production Since January—Current Prices Show Wide Divergence.

Pittsburgh, Pa., April 12—[Special.]—The American Iron and Steel Institute monthly report of steel ingot production shows that in March 3,296,799 gross tons were produced by 30 companies, which in 1918 made 84.03 per cent the country's total output of steel ingots. This indicates that during March steel ingots were produced by the industry as a whole at the rate of about 45,200,000 tons a year, this comparing with a rate of 44,200,000 tons in February and a rate of 40,650,000 tons in January. Output in 1919 was about 34,000,000 tons, the official statistics not being completed as yet, while output in 1917, the record year, was 43,619,200 tons, and output in 1912 and 1913, easily the two best tonnage years before the war, was about 30,275,000 tons.

The January output was larger than the expectations entertained in December, and the gains since January have been large. Altogether the production of steel in the past three months has greatly exceeded the expectations of both producers and consumers. The March output was at 50 per cent greater rate than the average of 1912 and 1913, even though in those years the railroads were large consumers and much steel was passing into works of permanent construction. Whatever the railroads may do in the future, the fact remains that they got very little of last month's steel production. Likewise, while there may or may not be heavy consumption of steel in future as in active periods in the past in large construction jobs, there was not such consumption in March.

A dilemma is presented by these considerations, and it is no wonder that one finds a very wide variety of opinions in the steel trade as to the future. A curious thing is that extreme views, one way or the other, predominate, few observers in the trade being disposed to take a middle course. One steel man, who is in constant contact with manufacturers, says that no man is wise enough to know that the country cannot continue on its present so-called "inflated" basis, no matter what bankers may say in predicting a panic in August or September, or the Steel Corporation, with a banker-dictated policy, may do in persisting in holding down its selling prices. This steel man argues that since the steel industry produced such a large amount of steel in March, with the steel passing into consumption and the shortage not being relieved, yet with the railroads and large construction work generally having accounted for very little of the consumption, there will be greater pressure still for steel in the near future, when these withheld needs are expressed in orders.

A totally different argument is made in other quarters. It is pointed out that since March production of steel was at a rate 50 per cent greater than the best average rate before the war, when railroads and investment buyers were helping largely to absorb the steel, the production in March must have been at a rate greatly in excess of the actual ultimate consumption, and that while steel does not appear, on the surface, to have become plentiful, such a development must occur very soon, as the high rate of production is maintained. There might be heavy demand later on by railroads and by investors in buildings, factories, etc., but that before that demand came into the market there would be a lull, in which prices would weaken.

#### The Market Test.

So far as the actual test of the market goes, steel appears still to be very scarce. There are buyers in the market willing to pay substantially as fancy prices for prompt deliveries as were ruling a few weeks ago. For instance, it is difficult, if not impossible, to buy merchant steel bars for really prompt shipment at 4 cents, quotations running up to 4.50 cents. The difficulty in securing prompt bars is illustrated in an interesting manner by the fact that in the past week several hundred tons of iron bars, to be made in Chicago, have been sold to Pittsburgh consumers who ordinarily use steel bars, the price being 3.75 to 3.85 cents, Chicago, or 4.02 to 4.12 cents delivered Pittsburgh, according to tonnage, the delivery in each case being from four to six weeks. Very fancy prices are being bid for sheets, the extreme case being a bid of 17 cents for automobile body sheets. Mills claim in the case of sheets that it is dealers, or those whom they now call "speculators," who are doing the fanciest-priced business. Mills, how-

ever, have sold in the past few days at as high as 7.50 cents for ordinary black sheets and 8.50 cents or higher for galvanized sheets.

On the other hand, this market test of buyers being willing to pay very high prices applies only to the immediate future. There is a distinct reluctance to make commitments for third quarter, or at least for the latter part of the third quarter, and it is probably on his account that the large independents are so slow in opening their order-books generally for third quarter. In bars, shapes and plates there has been very little business done for third quarter by independents, though, of course, the Steel Corporation would have no difficulty in selling for that delivery or later, on account of the lower prices it makes.

#### Sheet and Tin Plate Business.

Last week the American Sheet & Tin Plate Co. (Steel Corporation subsidiary) announced that early this week it would open its order-books for third quarter contracts in the case of jobbers and second half contracts in the case of manufacturing consumers at the following prices: Blue annealed sheets, 10-gauge, 3.55 cents; black sheets, 28-gauge, 4.35 cents; galvanized sheets, 28-gauge, 5.70 cents; 100-pound tinplate, \$7 per base box. These are the prices named in the Industrial Board schedule of steel prices generally, which became effective March 21, 1919, and to which the Steel Corporation subsidiaries have uniformly adhered since then on all products, except, of course, in the case of export trade.

This action furnishes proof, although no proof has been needed, that the Steel Corporation has no intention of departing from its price policy, despite the fact that for some time past all the independents have been securing higher prices, in most cases much higher prices, on their current sales.

The question might be asked whether this great divergence in prices, with independents securing from a half-cent to three or four cents a pound more for steel products than the Steel Corporation, which makes about 44 per cent of the country's steel, does not make an extremely embarrassing situation for a great many consumers. The answer is that as to consumers in general it has not thus far, for the reason that the independents have still been delivering much steel on old contracts at the regular prices. The fancy-priced sales represent but a small part of the actual consumption thus far. Large consumers, like automobile makers, have had heavy deliveries at basis prices, and as a rule their fancy-priced purchases have been of relatively small tonnages, only slightly increasing the average cost of all the steel bought. Frequently the extra cost is balanced by the plant being able to operate more nearly at capacity, this tending to bring down cost of production as compared with a 75 or 80 per cent operation. In not a few instances, however, the high prices have worked a hardship to consumers. If these prices are continued, as old contracts are worked out, a much more serious situation will be presented.

#### Pig-Iron.

Pig-iron production has increased further, and is now at a rate somewhat above 40,000,000 tons a year. This is despite the fact that a few furnaces are still somewhat short of coke, while there is a considerable number of idle furnaces ready and anxious to get into blast, if only they can secure coke. Evidently productive capacity in pig-iron, instead of being at 43,000,000 or 44,000,000 tons a year, as estimated until recently, is really well above 45,000,000 tons. Eventually coke will be available as transportation conditions improve, and the question arises whether the present admittedly high prices for pig-iron will then disappear. Thus far the market shows no evidence of being on the verge of a decline, being indeed somewhat stiffer than a fortnight ago. The attitude of furnaces has been strengthened by the high prices that became established for Connellsville coke when Government restrictions were removed, furnace coke being now quotable at \$11 to \$12 per net ton at Connellsville ovens. Judged by their purchases of pig-iron, the foundries seem to be able to pay ruling prices, but the steel works are in a different category. They can sell their steel for early deliveries at prices easily enabling them to pay present prices for pig-iron, but they cannot sell all their

steel for third quarter at prices that would fit with the present pig-iron market, and for fourth quarter there is no steel market at all. The steel works, therefore, must hold off until the time comes when they can get a proportionate price for their steel, or until pig-iron comes down. The market is quotable firm, but inactive, at \$42 for Bessemer, \$41.50 for basic and \$42 for foundry iron f. o. b. valley furnaces, freight to Pittsburgh being \$1.40.

### Monthly Report of Steel Ingot Production.

The American Iron and Steel Institute of New York in its monthly report on 30 companies, which made about 84.03 per cent of the steel ingot production in 1918, gives the following figures for January to March, 1920:

Months.	Open hearth. Gross tons.	Bessemer. Gross tons.	All other. Gross tons.	Total. Gross tons.
January, 1920.....	2,241,318	714,657	10,687	2,966,662
February .....	2,152,106	700,151	12,867	2,865,124
March .....	2,484,965	795,164	16,640	3,296,799

### Production of Pig-Iron in the United States in 1919.

PRODUCTION OF PIG-IRON BY STATES, 1915-1919.					
States.	1915.	1916.	1917.	1918.	1919.
Maine, Mass., Conn.....	7,802	5,719	10,527	12,485	13,678
New York, New Jersey.....	2,104,780	2,352,535	2,417,527	2,871,118	2,070,288
Pennsylvania .....	12,790,668	16,506,284	15,539,728	15,198,271	12,276,585
Maryland .....	251,548	501,452	422,212	373,817	244,002
Virginia .....	251,346	389,885	530,311	513,737	319,409
Alabama .....	2,049,453	2,762,885	2,953,705	2,587,852	2,130,092
W. Va., Ga., Ky., Tex.....	291,940	554,690	561,951	594,675	413,091
Tennessee .....	177,729	355,374	369,951	369,822	190,514
Ohio .....	6,912,962	8,602,895	8,518,693	8,764,132	7,102,627
Illinois .....	2,447,220	3,922,512	3,456,915	3,440,307	2,558,213
Indiana, Michigan.....	1,986,778	2,221,708	2,657,503	3,073,599	2,715,659
Wisconsin, Minnesota.....	372,966	811,325	738,541	750,366	605,619
Mo., Iowa, Col., Mont., Wash., Ore., Cal.....	271,921	437,633	453,742	504,463	375,587
Total.....	29,916,213	39,434,797	38,621,216	39,054,644	31,015,364

PRODUCTION OF PIG-IRON BY STATES, 1918-1919.					
States.	1918.	Per cent.	1919.	Per cent.	
Pennsylvania .....	12,276,585	39.58	15,198,271	38.91	
Ohio .....	7,102,627	22.90	8,764,132	22.44	
Indiana, Michigan.....	2,715,659	8.76	3,073,599	7.87	
Illinois .....	2,558,213	8.25	3,440,307	8.81	
Alabama .....	2,130,092	6.87	2,587,852	6.63	
New York, New Jersey.....	2,070,288	6.68	2,871,118	7.35	
Wisconsin, Minnesota.....	605,619	1.95	750,366	1.92	
W. Va., Ga., Ky., Tex.....	413,091	1.33	594,675	1.52	
Virginia .....	319,409	1.03	513,737	1.32	
Mo., Iowa, Col., Mont., Wash., Ore., Cal.....	375,587	1.21	504,463	1.29	
Maryland .....	244,002	.79	373,817	.96	
Tennessee .....	190,514	.61	369,822	.95	
Maine, Mass., Conn.....	13,678	.04	12,485	.03	
Total.....	31,015,364	100.00	39,054,644	100.00	

### Pig-Iron Consumption Increasing in Birmingham District—Scrap Iron and Steel Market Quiet.

Birmingham, Ala., April 12.—[Special.]—Southern furnace companies are still selling pig-iron for delivery during the last half of the year, though the sales during the past week were not in great tonnage to the lot. The Tennessee Coal, Iron & Railroad Co. holds to the \$38 per ton price, No. 2 foundry, 1.75 to 2.25 per cent silicon, and probable make for third and fourth quarters is being sold against. The Sloss-Sheffield Steel & Iron Co. is still taking on business, but asking \$42 per ton. The Alabama Company is out of the market. Other companies are on a \$40 per ton level. Deliveries of pig-iron are still being delayed by reason of the car shortage. Sales of iron for the past week were mainly to the North and into the Cincinnati and Chicago territories. Inquiries are still steady. The production is about the same it has been for three weeks and will remain so until there is a change for the better in raw material output and delivery. One furnace, belonging to the Alabama Company, will blow in during the latter part of the week, if nothing unforeseen happens. The Sloss-Sheffield Steel & Iron Co. will hardly be ready with its North Birmingham furnace, now under repairs, for 30 days yet. The Tennessee Coal, Iron & Railroad Co. will soon have a furnace ready and will apply the torch at once.

One of the active furnace companies of the district holding for the higher quotations has sold upwards of 60,000 tons of iron during the past 60 days, delivery spread over the balance of the year.

Consumption of pig-iron in this district is constantly increasing. The cast-iron pipe plants, the soil-pipe and fittings plants, the foundries and machine shops, all report additional contracts received during the past week. Cuba orders were brought back the past week by the head of one of the active foundries and machine-shop concerns here, and statement is made that there is work in hand and in sight that will supply these industries through the year.

The American Cast Iron Pipe Co., of which J. R. McWane is president, announces the prepared joint electric cast-iron pipe. The statement is that the desirability of light-weight cast-iron pipe has been expressed a long time. The high-priced raw materials, labor and transportation have produced a situation in which the old standards of pipe weights and thicknesses are wasteful. Actual announcement to the trade of a remedy of the situation was deferred until the solution was certain, past the experimental stage. Five years of experiments now are over it is asserted. The iron for this new pipe is super-heated in an electric furnace. A little more than a year ago the experiments had brought about a conclusion that uniformly high-temperature iron was the secret of making light-weight pipe to withstand the same pressures as thicker walled pipe of the present standards. This high-temperature iron cannot be produced satisfactorily and dependably in cupolas. With an electric furnace, however, uniformly high-tensile strength castings have been produced for months. Molten iron from both the cupola and the blast furnace are combined in the electric furnace to obtain the proper analysis, and then the temperature of the mixture is raised to a higher degree than possible in the cupola. The high sulphur increment incident to cupola iron thus is avoided, and essential metalloids usually lost in cupola practice are saved. Undesirable gases are freed from the metal by the agitation set up by the electric current, so that the chemical properties, as well as the temperature of the iron, are better controlled by the electric current passed through the furnace arcs by the automatic switchboard. The result is a molten iron mixture low enough in carbon and silicon to insure high tensile strength and hot enough to make good, thin-section castings. Tests of this electric iron have demonstrated that it is possible to make it with tensile strength running from 30,000 to 40,000 pounds per square inch, and a transverse strength on the standard 2-inch by 1-inch bar of 2000 to 3500 pounds, with a deflection of .38 to .50 of an inch. The following standards for electric pipe have been decided on: Tensile strength, 30,000 pounds per square inch; transverse strength, 2600 pounds; deflection, .38 inch. Hand-in-hand with the development of the light-weight electric pipe during the past several years, the research department of the American Cast Iron Pipe Co. has conducted a series of experiments looking to a simplified and more efficient joint, and the McWane prepared joint is the result and is furnished with all weights of pipe. This is a factory-made joint. It greatly simplifies pipe-line construction, because to make a joint in the trench it is necessary only to insert a plain end into a bell and calk the lead.

Steel in various shapes—rail, rod, wire, nails, etc.—is being shipped from Birmingham in quantity to Mobile, by rail and by water, the Warrior River route, to be shipped on the first steel boat produced at the Chickasaw Shipbuilding & Car Co. plant at Mobile, sailing about April 20 for Rotterdam. The boat, 9600-ton capacity, named the Chickasaw City, has had a trial and is ready for the cargo. The second boat produced is being finished up rapidly and will be given a trial trip shortly. As soon as it is found acceptable, cargo will be prepared from the works of the United States Steel Corp. for shipment to the far East. The United States Steel Products Co., the export subsidiary of the steel corporation, is taking over the boats being produced at Mobile, plans having been made for the construction of 14 in all so far. The first sailing will mark another era for the Birmingham district.

Development of Birminghamport, the port on the Warrior River, for Birmingham products, is being rushed. A radio station is being built, the telegraphing between Birmingham and the river and down the stream to be by this method. Already the service offered is being used to full capacity. The Ingalls Iron Works is working on a number of steel containers to be used on the barges to protect the freight from weather. Two of the self-propelled barges being constructed at St. Louis will be launched



next week, and within a few weeks will be sent to the river to be added to the equipment.

A deflection in the coal production in Alabama, but 277,957 tons being mined for the week ending April 3 as compared to 328,060 tons for the week of March 27, is accounted for in labor deficiency, car shortage and excessive rains during the week. There is need for all the coal that can be mined, despite the fact that all prices of coal f. o. b. mines and at the retail yards have been advanced from 50 cents to \$1 per ton, and information is heard to the effect that even \$1.25 per ton increase is asked at retail yards. Union labor in this section will hold a convention in Birmingham April 15 for the purpose of considering the wage scale and plans of operating mines as prepared by the coal operators of the State. The wage scale provides for an increase of 27 per cent in all wages as compared to the scale in effect on October 31, 1919. The rules governing the operation of mines provides for committees at each mining camp between employees and the company and an umpire to be appointed by the Federal judge of this district for cases in which there can be no agreement when issues arise as before set out. The elimination of collective bargaining is complete by the operators' plan. Leaders of the union reiterate their statement as to the wages and plans of the operators being unsatisfactory, and say that action will be taken at the convention, intimation being that a strike may be called. On the other hand, the assertion is made that the organization has lost much of its strength, and that if a strike is called, very little of the operations of industrial plants will be disturbed. It is also to be heard that many mine workers throughout the district are pleased with the increased wage scale and are hoping that the car situation will improve in order that there can be steady work at mines.

Railroads are taking up consideration of fuel contracts, and during this month two of the larger consumers of coal have been negotiating for their annual supply. In May and June two other large consumers will ask for bids on fuel needs. The Railway Fuel Co., with mines at Parrish, in Walker county, is now producing between 25,000 and 30,000 tons of coal per month. The Southern Railway is interested in this coal company. Two of the larger coal companies operating mines along the Southern Railway, west of Birmingham, have instituted suit in the Circuit Court here, alleging that there is a discrimination in the manner of distributing cars with which to haul coal; these companies declaring that they are not getting their proper share. The reply is made that companies providing fuel for railroads are getting cars, though there is no determined discrimination against coal mines. The railroad car shortage is felt worse in the coal regions of this district than elsewhere, though in all lines of industrial activities hereabouts, the claim is made there is need of more cars to catch up with the business in hand and in prospect.

The coke production in the Birmingham district will be materially increased this week when 60 of the 120 Somet-Solvay by-product coke ovens of the Sloss-Sheffield Steel & Iron Co., at North Birmingham, will be started up. The ovens are now being heated, and the first coke production is scheduled for Thursday. When the entire plant is in operation it is estimated upwards of 1500 tons of coke will be produced daily, besides other by-products, for which there is a demand. Even at the increased prices, coke is still in good demand. Foundry coke is being quoted at \$11, and a few sales are reported, the possibilities of a strike, lagging car service and labor deficiency holding back the booking of considerable business. The coke producers in this district have assurances that there will be need for coke through the balance of the year, and with the labor demands strong, the 27 per cent increase to continue for two years, no reduction in quotations can be figured out. The by-product plant of the Alabama By-Products Co., Morris W. Bush, president, at Boyles, 50 Koppers ovens, which began operations a few weeks ago, is doing well, and the coke and other products are finding steady demand. The purchase of railroad cars in the North and operating them between the Majestic and Bradford coal mines and the by-product plant, the coal supply is being kept steady. These cars are relieving a situation in this district that would have been disastrous in the case of this industry. The Tennessee Coal, Iron & Railroad Co. has its second new battery of 77 Koppers ovens at Fair-

field in blast, a battery of the old ovens now being under repairs. This company has its own cars and its own railroad operating between coal mines and the by-products plant. The Sloss-Sheffield Steel & Iron Co. will make such arrangements as will provide a steady supply of coal also for its by-products plant, not depending entirely on the railroads with its equipment.

The scrap iron and steel market continues quiet, dealers claiming that it is lagging. The waiting game so far as buying in quantity for future use is still on. One of the largest consumers of heavy melting steel continues offering \$5 per ton under what the larger dealers in old material are asking and apparently are getting their needs supplied. Asked as to the possibilities of the old-material market, the buyer for the big consumer of heavy melting steel said he was offering as much as he felt able to pay for the product and was getting a little here and there, the aggregate meeting his needs. The larger dealers who are holding quotations steady say they are buying in as much as they are delivering on old contracts, not trying to lay in stock for future needs, the present being cared for only. No predictions are offered this week by the scrap dealers as to the turn for the better in the market, but admit that they would rather see the lagging market rather than to induce buying by reducing quotations. No change is made in the list of quotations for the week. With but few exceptions, deliveries now are on old contracts. Where there is no buying by consumers, it is expected some strength will be felt by a return to the market for needs.

Quotations of pig-iron and iron and steel scrap in the Birmingham district are as follows:

#### PIG-IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$38.00 to \$42.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$41.60 to \$43.60; iron of 2.75 to 3.25 per cent silicon, \$43.20 to \$45.20; basic, \$40.00; charcoal iron, \$55.00, f. o. b. furnace.

#### OLD MATERIAL.

Old steel axles.....	\$31.00 to \$32.00
Old iron axles.....	30.00 to 31.00
Old steel rails.....	24.00 to 25.00
Heavy melting steel.....	24.00 to 25.00
No. 1 railroad wrought.....	24.00 to 25.00
No. 1 cast.....	30.00 to 31.00
Stove plate.....	29.00 to 30.00
Old car wheels.....	29.00 to 30.00
Old tramcar wheels.....	30.00 to 31.00
Machine shop turnings.....	15.00 to 17.00
Cast-iron borings.....	15.00 to 16.00

#### Delayed Plans for Coke Oven Construction Now to Be Carried Out.

Sabinas, Mexico, April 8—[Special.]—Just before the assassination of President Francisco I. Madero, Jr., and the placing in power of Victoriano Huerta, who was, in turn, succeeded by Venustiano Carranza as President, plans were well advanced for the construction by Salvador Madero of many large coke ovens at his coal mines near here. The fire-brick for these proposed ovens were made in Belgium on special designs and the shipment of the material arrived in Galveston just after the surviving members of the Madero family had been exiled from Mexico by order of Carranza. The value of this material was approximately \$2,000,000 gold, and it is said to have been the largest and most expensive shipment of its kind ever destined for Mexico. The shipment was finally sent by rail to Eagle Pass in bond, and there placed in storage pending a betterment of internal conditions in Mexico. It is now announced that the long delayed plans for constructing the coke ovens are to be carried out, and that the clay products which were brought from Belgium several years ago will be put to the use for which they were originally intended.

#### \$500,000 for Street and Other Improvements at Clarksdale, Miss.

Memphis, Tenn., April 10—[Special.]—One of the biggest single bond issues for municipal betterments in Memphis trade territory has just been authorized by voters at Clarksdale, Miss., who voted almost unanimously for \$500,000 for streets, a river bridge and other improvements. At Grenada, Miss., leading citizens have petitioned the city council to call an election to authorize \$125,000 in bonds for new schools.

# NEWS AND VIEWS FROM OUR READERS

[Publication in this department of letters from our readers does not mean that we either approve or disapprove the views expressed. We believe in a full and frank discussion of the mighty questions of the hour, for only in this way can the truth be found. Therefore we often publish letters with which we do not agree.—Editor Manufacturers Record.]

## The Vital Importance of Freedom of Expression.

CHARLES G. DENHAM, Dallas, Tex.

Before bringing to your attention a matter which I consider of paramount importance to the safety of our nation I cannot forbear congratulating you on your fearlessness in placing before the thinking public matters of vital importance to our country. Among the articles which you have printed criticising your views I have noticed a few which were stagnant with contempt, a few others all but questioning your patriotism, and still a few others plainly expressing the view of "one-sided" or "idol-worshipping" men. The larger portion of the critics, however, were men of large caliber, and the one act of your publishing all their views speaks highly of your desire to get at the fundamental truth of the subject discussed. We cannot all agree, but if we have any differences to express we should do so in a spirit of friendliness and with the one idea of so speaking that the reading public may form their own unbiased opinions.

Many have criticised your editorials relative to the President of the United States. In the main, I have shared the same views expressed through your paper. We all admire a man who is a "true executive," fearless, forceful and just. When President Wilson assumed the duties of President he seemed equipped with these traits. For the last few months his health has been failing, and no man who is not physically capable is mentally capable of ruling a nation—at least alone. We all appreciate our President; we all give him credit for his many great accomplishments; but we cannot sanction an extreme policy of "watchful waiting": we cannot sanction a weakness which allows a group of rebels calling themselves a nation to murder our citizens and rob our interests.

I mention these things simply that I may assure you others see through unsmoked glasses. Too many in this country have become "idolaters." When men and women reach that stage no amount of persuasion or concrete formula could change them. Keep up the good fight. Every man and woman in this country has a right to express his or her views if they are along constructive lines, and not destructive. Anything which holds the power of increasing our constructive elements is surely worthy of discussion, and the lines along which your magazine is now published are certainly 100 per cent constructive and 100 per cent American.

Just prior to the outbreak of the European war a certain principal in one of our public schools used the American flag as a means of punishing tardy pupils. Each room proudly had hanging on one of its walls an American flag. If a pupil came in tardy the tardy one was compelled to march to the wall whereon hung the American flag and take it down. All that morning the flag was tucked away in the teacher's desk. If there were two tardy pupils in one room, the flag was put away for the day.

Think of using the American flag as a mode of punishment! No wonder even the little children rebelled. Their parents became indignant and demanded that the practice cease. But the beligerent principal refused to do so, and at one time stated "that he would do as he liked with HIS flags." A man who directed the teaching of hundreds of our future men and women was so illiterate as not to realize that the American flag is the property of no individual or set of individuals, but the emblem of peace and prosperity, freedom and equality, which the nation holds in common.

To make the matter short, the writer took the matter up with Washington, with the Governor of this State, the Honorable Mayor Wozencraft of Dallas, the American Legion, Salvation Army, and many other patriotic organizations. The Board of Education practiced too efficiently "watchful waiting" and refused to take definite action. All the above organizations expressed their sympathy, but only two took definite action. Those two, of course, were the world-wide loved institutions—the Salvation Army and the American Legion. Only two weeks ago the Board of Education was forced to demand a discontinuance of the

practice. Washington admitted there was no law by which the practice could be forced to end. It took the American Legion and Salvation Army to finally see that it did end.

Our country faces a vital condition where there is no protection for the American flag from those who wilfully, intentionally or unthinkingly see fit to desecrate it. We need the fearless support of such magazines as the MANUFACTURERS RECORD to take up the fight with the idea of encouraging the enactment of a Federal law which will forever end such attacks on our flag. In the interest of those who wish to see such an enactment I beseech you to take up the fight and bring the matter to the attention of the thinking public.

## The Price of Ignorance.

O. P. MCPHERSON, JR., Gloster, Miss.

On every hand we hear high prices "cussed" and discussed. The prices of food, clothing, of labor and of countless other things are topics of study and discourse every hour in every day. But the price of ignorance is the least realized, the least discussed, and yet the highest of all.

Ignorance is the foundation upon which high prices were built. When this foundation shall have been displaced by that of knowledge and judgment, then, and then only, shall prices be forced to lower and more equalized bases. In the first place, people are ignorant as to their needs. We must learn what are the things needed to sustain life, happiness and self-respect, and after learning their value buy them and forget the others.

Secondly, we are absolutely ignorant as to values. When we buy an article, the only idea we have of its value is the price we pay for it. "The higher the price the better the value" is our motto. We do not recognize quality when we see it. To illustrate this point, a shoe dealer told me he had had a certain pair of shoes on the bargain counter and had been doing his best to sell them for \$7, but was unable to convince anyone of their value, so he put them in the show window and marked them \$12, and they sold immediately. Ignorance cost some one \$5 in this one instance, which is only a very small illustration of what goes on every day in every place.

The buyer of shoes must learn to recognize value, wearing qualities, etc., without seeing the false mask of a high price. The buyer of food must know each article's food value and the amount of each required, regardless of cost, and so on down the long line of buyers and consumers who constitute the masses of people who are daily at the mercy of high prices because of the "price of ignorance."

## Suggests Acetylene Torch for Felling Cypress Timber.

OPDENWEYER-ALCUS CYPRESS CO., Sorrento, La.

We are impressed with the wonderful work being done with the acetylene torch in cutting and welding metals, and it occurs to us that this burning process might be profitably employed in the felling and cutting of cypress timber.

We realize that fire could not be used for this purpose in dry forests, but the cypress swamps are so wet, the ground being covered with water most of the time, that a fire would constitute no hazard to the timber.

It occurs to us that you might be in position to furnish us with addresses of manufacturers who have experimented along the lines mentioned above or would be willing to do so.

The Lufkin (Tex.) Chamber of Commerce advises that it has a proposition to offer an overall or shirt manufacturer; also other propositions suitable to manufacture of furniture, boxes, show-cases, etc. A large amount of raw material is said to be available close by for such concerns.

## RAILROADS

### To Improve Railroad Car Service.

For the purpose of working the freight cars of the country as a unit and to the best advantage of shippers, the railroads have voluntarily formed a Commission on Car Service of the American Railroad Association to work in close co-operation with the Interstate Commerce Commission at Washington, and G. F. Richardson, who has returned to the Southern Pacific system as superintendent of transportation after several years of war service at Washington on car distribution, says:

"One of the big tasks confronting all roads right now is to locate and secure their own freight equipment, which is scattered all over the country. Among the 2,450,000 freight cars pooled by the Railroad Administration were 35,800 belonging to the Southern Pacific company. Approximately two-thirds of these cars are on foreign lines while in their place we have cars from almost every railroad in the country. Normally 75 per cent of our cars are on home lines or direct connections which are likely to use them for a return load. We are anxious to get our own cars on our own lines again so as to make whatever repairs are necessary and have them available for the coming crop movements."

Other lines are in a similar fix with respect to equipment, and to improve conditions the Commission on Car Service is operating under an agreement signed by the various roads to abide by the car service and per diem rules and authorizing the commission to act as their agent in all car service matters. But to meet emergencies the commission can suspend or permit the departure from rules requiring the return of cars to home roads and to transfer cars of one railroad or territory to another where the public need requires.

W. C. Kendall is chairman of the Car Service Commission, and serving with him are W. L. Barnes, W. J. McGarry, A. E. Fillmore and A. G. Gutheim, the last named representing the Interstate Commerce Commission.

To discourage laxity in returning equipment to home lines, the per diem charge or daily rental for cars on other than their home lines has been restored and the rate increased from 60 to 90 cents a day.

### Using Cars to the Best Advantage.

A highly interesting bulletin issued by the Material Handling Machinery Manufacturers' Association, 35 W. 39th street, New York, 4000 copies of which are being distributed by that organization to manufacturers, consumers and others, suggests that the present car shortage may be relieved materially if every person or company loading or unloading cars will explain to the men actually doing such work that every car released quickly helps each manufacturer by increasing his ability to get his goods quicker and at less expense, and that this finally reduces living costs for the men and everyone else. There are, it is also stated, 2,452,000 freight cars in the United States which are moving in trains only a very little more than 9 per cent of the time. Something more than 11¼ per cent of the time they are being loaded and the same amount of time being unloaded, if all are released before demurrage charges begin. The remainder, nearly 68½ per cent of the time, they are practically wasted owing to repairs, switching and needless delays. Therefore, if an hour a day can be saved for each car it would practically give the public service as if 102,000 more cars were added to the total of equipment.

### \$50,000,000 Bonds for the Pennsylvania System.

The Pennsylvania Railroad Co. has sold to Kuhn, Loeb & Co., New York, \$50,000,000 of 10-year 7 per cent mortgage bonds, which were at once disposed of to investors at par and interest through a syndicate. These bonds, it is stated, are secured by a pledge of \$50,000,000 of 6 per cent general mortgage bonds of the Pennsylvania Railroad and \$5,000,000 new general mortgage 6 per cent bonds of the Philadelphia, Baltimore & Washington Railroad of the Pennsylvania system. The purpose of this financing by the company was not publicly announced when the sale was made.

### Equipment Needs of the Railroads.

A press report from Chicago says that \$600,000,000 will be needed by the railroads this year to finance the purchase of new equipment, according to an announcement by the Association of Railway Executives at a meeting there when presidents of 65 railroads assembled to discuss division of the \$300,000,000 loan provided for by the new transportation act. The other \$300,000,000 required, it was stated, will be furnished by the stronger roads and through loans floated in the investment market. A summing up of equipment needs showed that 100,000 freight cars, 3000 passenger cars and 2000 locomotives are required by the railroads. Thomas De Witt Cuyler of Philadelphia, chairman, presided.

### Railroad Administration Wants More Money.

In requesting from Congress an appropriation of \$420,727,341 to close up the affairs of the United States Railroad Administration, Walker D. Hines, the Director-General, stated, according to dispatches from Washington, that the loss resulting from Federal control was \$900,478,756, but the Government has \$966,803,366 owing to it by the roads, that total having been advanced for operating expenses and betterments, this to be ultimately repaid to the Government. Before the roads were returned to their owners, on March 1, Congress appropriated \$1,450,000,000 for expenses of the Railroad Administration, so that this proposed new appropriation would raise the aggregate to \$1,870,727,341.

### New Equipment.

Chesapeake & Ohio Railway has ordered 20 Mallet type locomotives and 5 switching locomotives from the American Locomotive Co., the former of 220 tons and the latter 148 tons each.

Southern Pacific Company has ordered from the Pullman Company, Chicago, 35 passenger cars and 30 baggage cars, and it will build in its own shops 2000 box cars, 1000 flat cars, 1000 stock cars and 65 cabooses. Some of these will be constructed in the company's shops at Houston, Tex., and Algiers, La.

Chicago, Rock Island & Pacific Railway is reported to have ordered 500 gondola cars from the Bettendorf Company.

Texas, Oklahoma & Eastern Railroad has ordered a 10-wheel locomotive from the American Locomotive Co.

Recent locomotive inquiries reported include 15 Santa Fe type and 15 Mikado type for the Chicago, Burlington & Quincy Railroad and 15 Mikado type for the Missouri Pacific Railway.

### General Manager Appointed.

Arthur L. Kempster has been appointed general manager of the New Orleans Railway & Light Co. to succeed John S. Bleecker, resigned. He was formerly connected with the Puget Sound Traction, Light & Power Co. at Seattle, Wash.

### Personal Mention.

L. A. S. Wood has been made manager of the illuminating section of the supply department of the Westinghouse Electric & Manufacturing Co., with headquarters at South Bend, Ind. Mr. Wood has been closely identified with the lighting industry since he began his business career, and is credited with being thoroughly familiar with lighting practice not only in this country, but in England, of which country he is a native. He came to the United States in 1911, and was shortly afterwards appointed area lamp expert of the Westinghouse Electric & Manufacturing Co.

Mr. E. J. Buegler, formerly consulting engineer of the Westinghouse-Church-Kerr Company, has been elected vice-president of The Foundation Company, and will be in charge of engineering.

Mr. Joseph H. O'Brien, formerly vice-president and chief engineer of the Central Construction Corporation, and before that for 15 years with the Westinghouse-Church-Kerr Company, has been appointed chief engineer of The Foundation Company.

W. T. Bringham has been appointed assistant general manager of sales of The Falcon Steel Co., Niles, O.



## TEXTILE

### Bleachery and Dye Plant Additions.

Plans and specifications are being prepared by J. E. Sirrine, Greenville, S. C., for a large addition to the Mooresville (N. C.) Cotton Mills' plant. These additions will be comprised in a 2-story 100x75-foot reinforced concrete building for dyehouse and bleachery, with equipment driven by electric power. The company will also extend boiler plant and add 1500 horse-power equipment with stokers and coal-handling apparatus, all of which has been ordered.

### Will Weave Webbing and Tape.

Sixteen narrow looms driven by electric power will be installed by the Georgia Webbing & Tape Co., Columbus, Ga., its daily output to be 1000 pounds. This company was mentioned recently as incorporated with \$10,000 capital, and it has organized with these officers: John S. Roberts, president; M. B. Roberts, secretary; C. M. Young, treasurer.

### Another Oil-Press Cloth Mill.

Plans and specifications have been accepted for an oil-press cloth mill at Columbia, S. C., for the Frank T. Parker Company. The building will be of brick mill construction, 106x86 feet, costing \$25,000. It will be equipped with \$10,000 machinery, driven by electric power. La Faye & La Faye are the architects and engineers.

### \$1,000,000 Mill for China Grove.

Capitalized at \$1,000,000, the China Grove (N. C.) Cotton Mills Co. has been incorporated for building a large plant. Among the incorporators are C. B. Miller of China Grove; A. E. Davis of Salisbury, N. C.; P. M. Barger of Mooresville, N. C.; A. C. Lineberger, S. P. Stowe and W. B. Puett, each of Belmont, N. C.

### Textile Mill Notes.

Cannon Manufacturing Co. will erect additional cotton mill at Kannapolis, N. C.

Riverside Manufacturing Co., Anderson, S. C., will increase capital from \$600,000 to \$1,000,000.

An increase of capital from \$250,000 to \$400,000 has been announced for the Watts Cotton Mill Co., manufacturer of hosiery yarns, Patterson, N. C.

Equinox Mills, Anderson, S. C., will install water and sewer systems for 150 homes in mill village. J. E. Sirrine, Greenville, S. C., is the engineer and architect.

Gluck Mills, Anderson, S. C., will install water supply and sewer systems for mill village of 150 homes. J. E. Sirrine, Greenville, S. C., is the architect and engineer.

Pilot Cotton Mills, Raleigh, N. C., will build an addition to dye plant, and has awarded contracts to the Gallivan Building Co., Greenville, S. C. J. E. Sirrine, also of Greenville, is the engineer and architect.

Rosemary Manufacturing Co., Roanoke Rapids, N. C., will enlarge and improve its power plant by installing turbine and coal-handling apparatus and extending its spray system, all of which has been ordered. J. E. Sirrine, Greenville, S. C., is the engineer and architect.

### Scottsville Power Corporation.

James River water-power will be developed by the Scottsville Power Corporation, organized to build a hydro-electric plant to generate electricity for transmission to Richmond, Lynchburg, Roanoke, Charlottesville, Staunton and Orange. Engineers are preparing plans and specifications for the necessary construction, including a dam at Fallsburg and another near Scottsville. This company's initial capital is \$100,000, and John L. Pitts of Scottsville is president, with W. H. Langhorne of Warren, Va., as first vice-president.

### Dr. Todd on World's Cotton Shortage.

During the recent visit of Dr. J. A. Todd, the great English economist, to St. Matthews, S. C., he gave some very interesting information concerning the culture of cotton in the various countries of the world. Dr. Todd was connected with the English Government for years, and had entire charge of the cultivation of cotton under the English Government.

In India cotton is picked practically every month in the year, this being due to the varied climate in the various sections of this great area. Cotton is planted in very small patches, and is worked entirely by hand, has a very inferior staple and does not compare with the American cotton.

In Egypt cotton is produced by irrigation, cultivated entirely by hand, including the breaking and preparing of the soil and the harvesting of the crop.

Some few years ago the English Government secured cottonseed from Mr. D. R. Coker of Hartsville, S. C., and the Garden of Eden of Biblical fame was planted with this seed, the soil being prepared by hand and cotton cultivated entirely by hand without horse-power. This soil produced 850 pounds of lint cotton to the acre. Dr. Todd stated that it would be years before England could increase her cotton production to any extent; that enormous appropriations were now being requested from the English Government for the purpose of putting additional dams on the Nile in the hope of increasing production and extending on up into the Sudan. Dr. Todd stated very emphatically that the world would need an enormously increased production in cotton, and he was told that the only possibility of this increase was to pay a reasonable price for the cotton to the producers of America; that the American producer would absolutely refuse to produce cotton longer, to be sold at a price competing with the half-naked, half-starved coolie laborer of India, Egypt and other European countries.

### No General Quarantine of Texas.

Washington, D. C., April 10.—[Special.]—There will be no general quarantine of the States of Texas and Louisiana, such as was threatened by the Department of Agriculture to check the spread of the pink bollworm, which it is held now infects nine of the southeastern counties of the Lone Star State and several parishes of Louisiana. After hearings extending over two days, held at the audience-room of the National Museum on April 6 and 7, the Entomological Board decided that a quarantine could be dispensed with and an agreement was reached between the board on the one part and the Governor of Texas and the planters on the other that certain local measures of regulation and quarantine would be resorted to rather than a sweeping embargo on all shipments from the State. These measures were in brief as follows:

Continuation of strict growing and harvesting regulations, such as are now in force, in the nine infected counties and the infected parishes of Louisiana.

Establishment of non-cotton-growing zones around every area found to be actually infected within the counties.

Establishment of a general non-cotton-growing zone around the entire area of the nine infected counties.

It is the belief of the board that the continuation of these measures for two years will serve to stop the bollworm, or at least reduce the infection to proportions which will render eventual extermination only a question of time.

To the hearing came a large delegation of Texas planters and representatives of commercial bodies. Senator Sheppard and the entire Texas delegation in the House of Representatives were at the sessions to protest against a general quarantine.

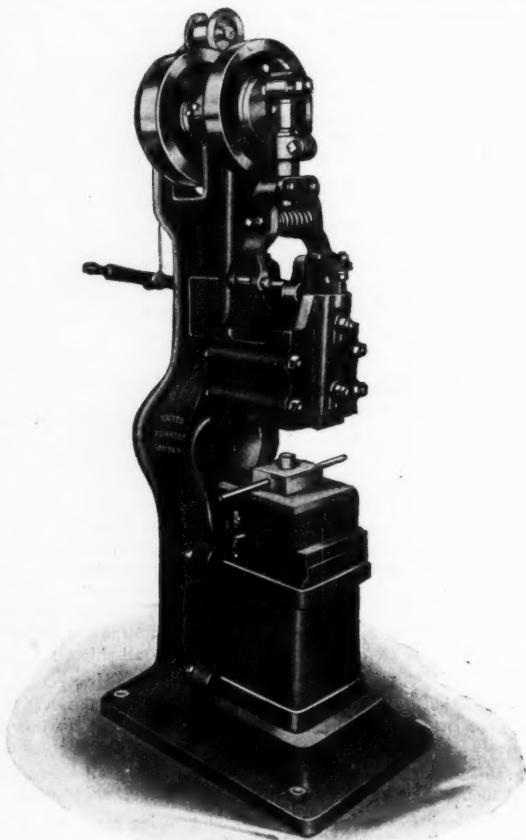
At the conclusion of the hearing an agreement was reached, to which the Governor of Texas was a party, that the Texas Legislature should be called in extra session late in May to make appropriations for the compensation of those planters who would be injured by the enforcement of the regulations agreed upon.

Figures compiled in the office of the Commissioner of Revenue, Danville, Va., reveal great activity in real estate there during the past year. More than 900 deeds of bargain and sale were recorded, transferring property valued at \$2,904,092.

## MECHANICAL

### Power Hammer for Pulverizing.

A machine designed for use in chemical laboratories to pulverize pig-iron samples for analysis is the Fairbanks power hammer shown in the picture herewith equipped with pulverizer. This is described as a time and labor saving device, pulverizing one-half to three-quarter inch cubes in two or three minutes so that the particles will be fine enough to pass through an 80-mesh sieve. It is stated that in one plant where one of these machines has been installed they used to employ three men with 26-pound sledgehammers to reduce one-half-inch cubes by hand, but after putting in the machine they were able to dispense with two men, while the time required for pulverization was reduced from 12 minutes to 2 minutes. Moreover, results were more uniform.



HAMMER WITH SPECIAL STARTING DEVICE.

The machine is made in one size, viz., "C," 100 pound weight of ram with two-inch mortar and pestle, and it can be provided for belt drive or motor drive as desired. It is manufactured by the United Hammer Co., Boston, Mass., and is operated by foot treadle or by a special starting device as shown in the illustration.

### New Feature in Pipe Coils.

In the accompanying illustration is shown a forged return bend, which is a patented feature of the pipe coils manufactured by the Locomotive Superheater Co., 30 Church street, New York City. These coils are designed and manufactured for use in condensers, heating coils, stills, refrigerating or ice-making coils, etc., and it is stated that there are distinct advantages to be gained in coils so constructed. Thus the company forges steel and iron pipes without joints, and important advantages of this

method of uniting pipes are described as follows: It leaves the bonded ends stronger than the body of the pipes; they are absolutely leakproof; moreover, the completed coil is practically a continuous pipe without threaded points, or joints welded by



FORGED RETURN BEND.

electric or acetylene process. The metal of the pipe itself is the medium used in the processes of bonding and forging; no metal is added. There is no reduction of cross-section area of the return bend, and the shortest possible return without excessive pipe friction loss is obtained; besides, greater heating or cooling surface within a given space is possible. All coils are tested to not less than 800 pounds per square inch hydrostatic pressure, and they are made in units ready for connecting up, pipe cutting, threading and fitting on the job being eliminated.

## FOREIGN NEEDS

[The MANUFACTURERS RECORD receives many letters from abroad asking for information about American goods, and others, from men who wish to represent American houses. Without assuming any responsibility for these concerns, we publish a summary of the foreign letters of inquiry from week to week.]

### Engines and Textile Machinery.

J. S. BUBBAR & SONS, Amritsar (Punjab), India.—We need to buy engines, mule spindles and the machineries of blowroom or boilers for our clients, so please ask the respectable firms to communicate with us. Our special lines are piece goods, cotton, silk and woolen and fancy piece goods of all kinds, to say poplin or yarn of all kinds.

### Calendars Wanted.

FARMERS' SUPPLY STORE, O. O. W. Landgren, Collamon, N. S. W., Australia.—Please have calendar manufacturers communicate with me. I desire wide range of samples of fancy and high-class calendars that I could sell through Australian travelers or "drummers," as you call them. I want the finest and best styles, and also wide range of medium-priced calendars of all sizes. If I can hear in time to import I shall hope to do a good business for next season.

### White Lead Powder.

USINE DE COULEURS MINERALES, Millo Frohlich, 35, Boulevard de Plombières, Marseille, France.—I would like to buy as soon as possible 10,000 kilos of white lead powder and guaranteed pure. Boxed in substantial cases, from 350 to 400 kilos, and quotations to be made in French money, c. l. f. Marseille. Only quotations as suggested will be considered. Delivery as soon as possible. Offer must be accompanied by sample. Correspondence in French suggested.

### Autos, Machinery, Hardware, Piece Goods, Etc.

BALFOUR & Co., 98-4 Clive Street, Calcutta, India.—We are prepared to take up exclusive agencies for the following American manufacturers: Automobiles, machinery, hardware of all descriptions, piece goods, leather goods, chemicals, sundry goods, galvanized ware, silk goods and other manufactured goods of America. We are also prepared to take up the agency of a shipping company who has no agency for fire, marine or life insurance. We want good connections for India, Burma and Ceylon; we have branches throughout.

### Cotton Goods, Corn Oil and Flour, Wheat Flour, Margarine.

PERCIVAL I. BURKE, 23 Church Street, Kingston, Jamaica.—I shall be particularly glad to secure connections with a reputable mill agent or distributor for brown sheetings and other staple cotton fabrics. With regard to food products, connections for the following commodities will be interesting: Corn oil, corn flour, wheat flour and margarine. The new steamship service supplied by the Baltimore Fruit & Trading Company between your city and Jamaica affords an excellent opportunity for trade relationships.

# Construction Department

## EXPLANATORY.

The MANUFACTURERS RECORD seeks to verify and obtain additional information regarding all enterprises reported in its Construction Department, by direct daily correspondence. Further facts of news value are published later from telegraph, mail and representatives' reports. We appreciate having our attention called to errors that may occur.

## DAILY BULLETIN.

The Daily Bulletin of the MANUFACTURERS RECORD is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$20.00 per year.

## Airplane Plants, Stations, Etc.

Ga., Atlanta—Aeromobile.—Thaden Aeromobile Mfg. Co. inctpd.; capital \$100,000; H. Thaden, Atlanta; Lucian B. Thaden, David H. Sibbett; both Washington, D. C.

## Bridges, Culverts and Viaducts.

Ala., Arlton.—W. S. Keller, State Highway Engr., Montgomery, Ala.; construct 450-ft. bridge and approaches over Pea River in Dale County; 6084 sq. yds. pavement; bids until May 10. (See Machinery Wanted—Bridge Construction.)

Ark., Edmondson.—Crittenden County Commissioners' Road-Improvement Dist. No. 4, G. W. Simms, Chrmn. Lyceum Bldg., Memphis, Tenn.; construct 120-ft. bridge over Fifteen-Mile Bayou; five 20 to 120-ft. I-beam and truss spans; bids until Apr. 19. (See Machinery Wanted—Bridge Construction.)

Ark., Little Rock.—Little Rock-Spring Lake Highway Dist., W. R. Bathurst, Secy., Boyle Bldg.; construct steel bridge over Fourche Bayou; two 100-ft. steel spans; 19-ft. roadway; bids until Apr. 22; Lund & Hill, Engrs., 527 Southern Trust Bldg. (See Machinery Wanted—Bridge Construction.)

Ark., Little Rock.—Pulaski County Comms., Broadway-Main Street Bridge Dist., Justin Matthews, Secy., 213 W. 2d St.; construct substructures of 2 bridges across Arkansas River at Broadway and Main Sts.; \$748,000; Missouri Valley Bridge & Iron Co., Contr., Leavenworth, Kans.; Lutten, Roberts & Titus, Conslt. Engrs., Indianapolis, Ind. (Lately noted inviting bids.)

Ark., Mountain Home.—Baxter County Road Improvement Dist. No. 3, Will Case, Secy., Gassville, Ark.; construct bridges; General Construction Co., Contr., St. Louis, Mo.

Fla., Bradentown.—City, L. L. Hine, Clk.; construct concrete protection to bridge piling; voted \$15,000 bonds. (Lately noted to vote.)

Fla., Bradentown.—City of Bradentown and Palmetto, Fla.; construct concrete protection to bridge piling; wood trestle on pine piling; \$15,000 to \$20,000; Harry Wadham, Engr., Bradentown. (Lately noted voting bonds.)

Miss., Clarksdale.—City Comms., R. E. Stratton, Jr., Clk.; construct 2d St. bridge; reservoir, and improve streets, etc.; voted \$500,000 bonds. (Lately noted to vote.)

N. C., Fayetteville.—City, Jno. Underwood, Mayor; construct 3 concrete covers or bridges on Cool Springs St. and Campbell Ave.; Kennedy Co., Contr.; E. C. Derby, City Engr. (Lately noted inviting bids.)

N. C., Smithfield.—Johnston County Commissioners; construct 4 concrete bridges; 6 mi. gravel road; R. P. Asheley, Contr.

Okla., Tulsa.—Tulsa County Comms.; construct 7 bridges; 10½ mi. Owasso-Washington County road; invite bids.

Tenn., Union City.—Obion County Comms.; construct steel bridges.

W. Va., Madison.—Boone County Comms.; construct concrete bridge across White Oak Creek; \$7500; Shaid Contracting Co., Contr.

W. Va., Mordue.—Boone County Comms., Madison, W. Va.; construct bridge across Big Elk Creek; \$6433; Corus Thomas & Co., Contrs., Huntington, W. Va.

## Canning and Packing Plants.

N. C., Hickory.—Catawba Creamery Co., W. J. Shuford, Prest.-Mgr.; contemplates establishing packing plant.

S. C., Orangeburg.—Carolina Packing Co. of South Carolina organized; capital \$500,000; W. W. Love, Prest.; Milton Calder, Secy.-Treas.; all Wilmington, N. C.; purchased Orangeburg Packing Co.'s plant; daily capacity 500 hogs and 50 cattle.

Tenn., Milan.—Humboldt Canning Co., Humboldt, Tenn.; establish branch cannery; mchy. purchased; preserve strawberries.

## Clayworking Plants.

Miss., Philadelphia.—Bricks, etc.—F. L. White; erect \$5000 factory building; install \$16,000 brick and tile mchy.; daily output 50,000 bricks and tiles. Supersedes recent item. (See Machinery Wanted—Rails.)

Tex., Fort Worth.—Bricks.—Acme Brick Co.; increase capital from \$200,000 to \$650,000.

## Coal Mines and Coke Ovens.

Ala., Birmingham.—Alabama By-Products Corp. chartered; capital \$5,000,000; Morris W. Bush, Prest.; Horace Hammond and A. P. Bush, V.-Ps.; H. L. Morrow, Secy.-Treas.; acquired 50-oven plant of Birmingham Coke & By-Products Co.; mfres. coke, ammonium sulphate, tar and benzol.

Ala., Carbon Hill.—Chiska Coal Co. inctpd.; capital \$2000; J. T. Wakefield.

Ala., Montgomery.—Consumers' Coal Co. inctpd.; capital \$20,000; R. E. Thornton.

Ark., Clarksville.—Nichols-King Coal Co., J. E. Nichols; sink mine shaft.

Ky., Manchester.—King Blue Gem Coal Co. inctpd.; capital \$3000; J. W. and J. R. Petrey, Joe E. Payne.

Ky., Typo.—Mitchell-Willis Coal Co.; open additional mines; improve plant; erect 25 additional miners' houses.

Md., Cumberland.—Georges Creek Coal Mining Co.; plans extensive improvements; increase capacity; develop drift openings; acquired additional coal land.

Mo., Mendota.—Black Diamond Coal Co., St.

Joseph, Mo., inctpd.; capital \$150,000; T. L. Greenleaf, P. A. Hilderbran, both St. Joseph; W. S. Fleming, Kansas City, Mo.; leased 1288 acres; develop.

Tex., Eagle Pass.—International Coal Mines Co., D. H. Echols, Mgr.; develop 2880 acres; initial output 250 to 300 tons daily; install steam hoist and electric coal-cutting machines. Lately noted. (See Machinery Wanted—Mining Machinery; Mine Supplies.)

W. Va., Charleston.—Southern Production Co. inctpd.; capital \$50,000; T. Brooke Price, E. H. Shonk, Charles Rand.

W. Va., Morgantown.—Monongahela Development Co.; acquired 1450 acres coal land.

W. Va., Morgantown.—Dellslow Coal Co. inctpd.; capital \$50,000; Thomas J. Wotring, J. M. Wood, F. E. Sapp.

W. Va., Huntington.—Westkole Fuel Co. inctpd.; capital \$50,000; H. K. Fox, John S. Marcum, F. P. Kuhn.

W. Va., Huntington.—Overseas Coal Corp. chartered; capital \$50,000; H. K. Fox, John S. Marcum, J. W. Teague.

W. Va., Philippi.—Laurel Hill Coal Co., J. E. Gaskill, Fairmont, W. Va.; acquired established plant with 400 acres coal land; enlarge; increase capacity.

W. Va., Tunnelton.—Tunnelton-Freeport Coal Co. organized; James S. Hunt, Prest.; develop 150 acres; daily capacity 50 tons from each of two openings. (Lately noted inctpd., capital \$75,000.)

W. Va., Williamson.—Tug Valley Fuel Co. inctpd.; capital \$50,000; P. A. West, Gen. Mgr.

## Concrete and Cement Plants.

W. Va., Charleston.—Cement Products.—Fibrated Products Corp. chartered; capital \$100,000; Charles J. Ruebling, Fred E. Lang, E. J. King; mfres. cement and paving material.

W. Va., Wheeling.—Concrete Products.—Concrete Products & Building Co. inctpd.; capital \$100,000; T. Smith, W. A. Stoetzer; both Wheeling; G. Schramm, Bridgeport, W. Va.

## Cotton Compresses and Gins.

Ala., Livingston.—People's Gin Co. inctpd.; capital \$5000; H. L. Mullen.

Ga., Lyerly.—Chas. A. Lyerly, Chattanooga, Tenn.; purchased Farmers' Gin Co. plant; increase plant daily capacity from 50 to 60 to 100 to 120 bales cotton. (Supersedes recent item.)

Miss., Roundaway.—Roundaway Mfg. Co.; rebuild burned ginnery.

N. C., Bunn.—Bunn Ginning Co. inctpd.; capital \$25,000; Robt. White, Mrs. O. L. Tant. (Supersedes recent item.)

N. C., Burgaw.—Farmers' Gin Co., Atkinson, N. C., organized; capital \$50,000; W. A. Corbett, Prest., Atkinson; Hugh Davis, V.-P.; Burgaw; erect 160x40-ft. metal-construction mill; purchased \$12,000 gin mchy. and oil engine; daily capacity 80 bales cotton.

Okla., Ardmore.—Croskell Gin Co. inctpd.; capital \$60,000; Lee Paschall, Ardmore; H. H. Croskell, O. A. Sparks; both Berwyn, Okla.

S. C., Troy.—Troy Oil Mill, F. E. Evans,

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.



Prest., Greenwood, S. C.; build burned gin-  
nery.

Tex., Lodge.—Rosamond Gin Co., Memphis,  
Tex.; erect gin.

Tex., Marlin.—T. F. Glass; rebuild burned  
electric-power gin; loss \$15,000.

Tex., Paris.—Paris Compress & Warehouse  
Co. inceptd.; capital \$350,000; J. T. Rountree,  
J. A. Moss, H. P. McClanahan.

### Cottonseed-Oil Mills.

Ala., Eps.—Alabama Vegetable Oil Co.  
inceptd.; capital \$100,000; Wiley Alford.

### Electric Plants.

Ala., York.—York Light & Power Co. inceptd.;  
capital \$10,000; J. B. Ross.

Ark., Brinkley.—Arkansas Utilities Comsn.;  
construct transmission line to Clarendon and  
Cotton Plant, Ark.; \$260,000.

Ark., Little Rock.—Arkansas Light & Power  
Co.; contemplates erection transmission line  
to Russellville.

D. C., Washington.—Potomac Electric Power  
Co., 438 Washington St.; remodel plant;  
\$17,000.

Ga., La Grange.—Valley Waste Mills, W. H.  
Jones, Mgr.; install 750 K. W. additional re-  
ceiving station and motors.

La., Natchitoches.—City, W. F. Johnson,  
Mayor-Commr.; construct and equip light and  
water plant; extend light and water lines;  
install sanitary sewer system; voted \$240,000  
bonds.

Miss., Clarksdale.—City Commrs.; improve  
light and water systems and streets; voted  
\$500,000 bonds. (Lately noted to vote.)

Miss., Pickens.—Town; extend electric-light  
system; vote on \$10,000 bonds. Address The  
Mayor.

Mo., Carthage.—City; defeated \$100,000 elec-  
tric and water plants bonds; call another  
vote. Address The Mayor. (Lately noted to  
vote Apr. 6.)

N. C., Kinston.—City, Joe Dawson, Mayor;  
install power plant; 1500 K. W. 1875 K. V. A.  
at 80 per cent PF turbo-generator unit; sur-  
face condenser, complete, with dry vacuum  
and hot-well pumps; bids until May 11; W. C.  
Olsen, Conslt. Engr., Sumter, S. C. (See  
Machinery Wanted—Electric Plant.)

N. C., Roanoke Rapids.—Rosemary Mfg. Co.;  
extend and improve plant; install turbine  
coal-handling apparatus; enlarge spray sys-  
tem; equipment purchased; J. E. Sirrine,  
Arch't., Engr., Greenville, S. C.

Okla., Tulsa.—Tulsa Standard Electric Co.  
inceptd.; capital \$10,000; Edward Rau, G. D.  
Rankin, H. B. Rickard.

S. C., Mt. Carmel.—Little River Light &  
Power Co. organized; L. L. Hester, Prest.-  
Treas.; erect \$20,000 dam and power-house;  
475 H. P.; construct 2 mi. \$5000 transmission  
line. (Lately noted inceptd., capital \$20,000.)

Tenn., Knoxville.—Knox County Trans-  
mission Co. inceptd.; capital \$10,000; W. F.  
Pankey, C. Wright, H. B. Whiteman.

Tex., Newcastle.—Newcastle Light, Power &  
Ice Co. organized; R. H. Helm, Secy.-Treas.;  
install \$50,000 plant; bids from Apr. 9 to 12.  
Lately noted inceptd., capital \$50,000. (See  
Machinery Wanted—Electrical Equipment.)

Tex., Palacios.—City Light & Water-works,  
M. Lipscomb, Supt.; has \$50,000 plant; install  
oil engines; 150 H. P. Supersedes recent item.  
(See Machinery Wanted—Engines.)

Tex., Tulla.—City; plans installation power  
and water plants. Address The Mayor.

Tex., Wichita Falls.—City; install orna-  
mental street-lighting system. Address The  
Mayor.

W. Va., Huntington.—Consolidated Light,  
Heat & Power Co., W. R. Power, Gen. Mgr.;  
expend \$100,000 improvements; secure electric-  
ity from Virginian Power Co.

W. Va., Huntington.—Virginian Power Co.,  
Charleston, W. Va.; supply electric power to  
Consolidated Light, Heat & Power Co.; W. R.  
Power, Gen. Mgr.; extend high-tension trans-  
mission lines from Cabin Creek to Hunting-  
ton; 3000 K. W. power; increase to 15,000 K.  
W.; install \$350,000 improvements, including  
250 H. P. turbine at Cabin Creek plant.

### Fertilizer Factories.

Ala., Huntsville.—National Basic Fertilizer  
Co. organized; C. E. Elgin, Prest., Searles,  
Ala.; H. C. Laughlin, Secy.-Treas.; T. W.  
Pratt, Mgr.; all Huntsville; erect mill con-  
struction fertilizer factory building; D. C.  
Cowan, Supt.-Constr. Engr. (Supersedes pre-  
vious item.)

Ga., Dawson.—Dawson Cotton Oil Co., H.  
A. Petty, Prest.; has building; install dry-  
mixing plant; daily capacity 150 tons com-  
mercial fertilizer. (Supersedes recent item.)

Ga., La Grange.—Swift & Co., Chicago, Ill.;  
rebuild burned plant on larger scale.

Md., Salisbury.—Albert W. Walls; plans fer-  
tilizer factory.

Md., Salisbury.—Farmers & Planters' Co.;  
plans fertilizer factory.

S. C., Greer.—Greer Fertilizer Co.; increase  
capital to \$150,000.

### Flour, Feed and Meal Mills.

N. C., Henderson.—Vanco Mills organized;  
capital \$125,000; C. V. Singleton, Prest.; E.  
Falkner, V.-P.; F. B. Robards, Secy.-Treas.;  
purchased Seaboard Feed & Produce Co.;  
erect flour mill and grain elevator.

Okla., Enid.—J. T. Shaw; rebuild burned  
grain elevator; loss \$215,000.

Okla., Oklahoma City.—Oklahoma City  
Terminal Elevator Co., 522 Grain Exchange  
Bldg., organized; P. L. Jacobson; erect  
1,200,000-bu. grain storage and handling  
elevator; concrete; install clippers, cleaners  
and drier. Lately noted contemplated. (See  
Machinery Wanted—Grain Elevator Equip-  
ment.)

Okla., Waukomis.—Waukomis Co-operative  
Elevator Co. inceptd.; capital \$25,000; R. N.  
Brittan, A. P. Atherton, Anton Thomas.

W. Va., Charleston.—Davis Flour & Feed  
Co. inceptd.; capital \$1,000,000; H. G. Davis,  
William Burdette Mathews, O. F. Payne.

### Foundry and Machine Plants.

Ala., Birmingham.—Pipe, etc.—Stockham  
Pipe & Fittings Co., R. C. Foster, Secy.;  
increase capital.

Ala., Gadsden.—Stoves.—A. & J. Manufac-  
turing Co., Otto Agricola, Prest.; erect stove  
foundry; 80x250-ft. foundry-room, 80x250-ft.  
mounting and wareroom; reinforced concrete  
construction; Truscon Steel Co., Contr.,  
Youngstown, O. (Lately noted by error as  
Baltimore, Md.)

Fla., Orlando.—Mill and Plumbing Sup-  
plies.—Cohoon Bros. inceptd.; capital \$75,000;  
Robert S. Cohoon, Prest.; M. Donald Lee,  
Secy.-Treas.

Ga., La Grange.—Machinery.—J. T. Tice Co.  
inceptd.; capital \$25,000; J. T. Tice, H. W.  
Caudle, W. R. McCall.

Ga., Atlanta.—Motor Engines.—Red Diamond  
Motors Co. organized; capital \$5,000,000; erect  
plant; mfne. internal combustion motors.

Ga., Rome.—Stoves.—Eagle Stove Works, Jno.  
P. Davis, Prest.; increase output; double  
capital.

Ky., Louisville.—Plows.—Avery & Sons,

Charles F. Huhlein, Prest., 7th and Lee Sts.;  
plans to erect buildings; double capacity; in-  
creased capital by \$4,400,000.

Tex., Port Neches.—Hydraulic Machinery.—  
Hydraulic Machinery Mfg. Co. (lately noted  
organized, capital \$250,000), Clayton F. Holmes,  
Mgr.; erect 3 units, each 60x140 ft.; fireproof  
construction; \$75,000; install machine shop,  
sheet metal-working and foundry equipment.  
(See Machinery Wanted—Foundry Equip-  
ment; Machine Tools; Metal-working Ma-  
chinery.)

W. Va., Sistersville.—Tanks and Boilers.—  
Sistersville Tank & Boiler Works; increased  
capital from \$100,000 to \$200,000.

### Gas and Oil Enterprises.

Fla., Palm Grove.—Taylor County Oil Co.  
inceptd.; capital \$25,000; R. C. Flack, Prest.;  
W. F. Calhoun, Secy.-Treas.

Fla., Tallahassee.—Central Florida Oil &  
Gas Co. inceptd.; capital \$250,000; F. M.  
Phillips, Prest.; B. M. Cates, Secy.-Treas.

Ky., Franklin.—Simpson County Flat Rock  
Oil & Gas Co. inceptd.; capital \$15,000; J. M.  
Sloss, Brady Perdue, Jno. L. Pond.

Ky., Louisville.—Refinery.—Dixie Belle Re-  
finery, H. G. Murphy, V.-P. and Mgr., 1606  
Inter-Southern Bldg.; erect 1500-bbl. refinery;  
\$500,000; mfne. gasoline, lubricating oils and  
by-products. (Lately noted bids until Mch. 1.)

Ky., Paintsville.—Seminole Oil & Gas Co.  
inceptd.; capital \$60,000; F. P. Blair, Chas. A.  
and A. J. Kirk.

La., Mansfield.—Refinery.—Associated Pro-  
ducing & Refining Corp., Malcolm Burns,  
Prest., 317 Marshall St., Shreveport, La.;  
erect 5000-bbl. refinery; fireproof; \$532,000;  
install boilers, agitators, coils, condensers,  
etc.; purchased equipment; J. G. Hamilton,  
Constr.-Engr., Mansfield. (Lately noted.)

Miss., New Albany.—Refinery.—Union  
County Oil & Refining Co. inceptd.; capital  
\$200,000; J. J. King, W. N. Parks.

Okla., Oklahoma City.—Swanson Co., 5 N.  
Robinson St., inceptd.; capital \$1,000,000; drill  
for oil. (See Machinery Wanted—Piping.)

Okla., Oklahoma City.—Oklahoma Oldgas  
Co. inceptd.; capital \$25,000; J. W. Mann, R.  
L. Hume, Jno. S. Bradley.

Tex., Fort Worth.—Cornucopia Oil Co.  
inceptd.; capital \$300,000; F. O. McKinsey, W.  
O. Reyes, H. E. Ritchey.

Tex., Houston.—Willow Creek Oil Corp.  
inceptd.; capital \$100,000; C. G. Daugherty, J.  
L. Short, Jno. Matranga.

Tex., Texarkana.—Refinery.—Farmers' Oil &  
Refining Co.; erect 3000-bbl. daily capacity re-  
finery; 8 buildings; mch. purchased; South-  
ern Steel Products Co., Contr., Shreveport,  
La.

Va., Richmond.—Cooper-Henderson Oil Corp.  
chartered; capital \$1,000,000; Howard C.  
Griffiths, Prest., New York; Wirt P. Marks,  
Secy., Richmond, Va.

Va., Richmond.—Gas Plant.—City, E. W.  
Trafford, Director; rehabilitate gas plant  
and distribution system; erect gas holder;  
Forestall & Robinson, Engrs. (Supersedes  
recent item.)

W. Va., Charleston.—Packard Oil Co.  
inceptd.; capital \$75,000; D. O. Blagg, S.  
Schaffer, V. Lambert.

W. Va., Sistersville.—Gasoline.—Amity  
Gasoline Co.; increase capital from \$1,000,000  
to \$1,500,000.

### Ice and Cold-Storage Plants.

Ala., Gadsden.—Gadsden Ice & Coal Co. or-  
ganized; capital \$100,000; C. B. Forman,  
Prest., Atalla, Ga.; B. W. Pruet, V.-P.; Joe

Lee Sta.;  
capacity; in-

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McCleskey, Secy.-Treas.; both Gadsden; has plant; increase storage capacity.

Fla., Perry.—Perry Electric Co.; install 30-ton ice machine.

Ky., Danville.—C. S. Lyons; install ice, planing mill and woodworking plants; has building.

Ky., Lexington.—Lexington Ice Co.; increased capital from \$25,000 to \$100,000.

Tenn., Memphis.—Memphis Packing Corp., M. P. Burt, Gen. Mgr.; erect 5-story 100x150-ft. cold-storage house; reinforced concrete construction; cork insulation; 75,000 sq. ft. floor space; increased capital from \$1,000,000 to \$2,000,000.

Tex., Bay City.—Texas Public Service Co., Mr. Dients, Mgr.; double plant's capacity; install electric generators, boilers and mchy. for additional 15-ton ice plant; purchased; \$90,000.

Tex., Beaumont.—Texas Ice Co.; increased capital from \$80,000 to \$100,000.

Va., Bridgewater.—Bridgewater Creamery & Ice Corp., O. D. Garber, Secy.; enlarge plant; increased capital from \$15,000 to \$100,000.

### Iron and Steel Plants.

W. Va., Wheeling.—Iron Furnaces, etc.—Whitaker-Glessner Co., Andrew Glass, Prest.; annual report for 1919 operations presents following data: \$1,052,140.27 expended for properties, plant additions and plant improvements; in progress or authorized and expected to be complete in 1920 as follows: 18-in. continuous sheet bar and billet mill, blast furnace power-house addition, equipment for handling river coal, at Portsmouth (Ohio) works; new boiler and power-house at Wheeling mill; new tinhouse and ceiling factory at Wheeling; new warehouse and factory building at Kansas City, Mo., for Wheeling corrugating department; new building for can storage at Warwood, for Wheeling can department; store building and dwellings for 100 families, through Beech Bottom Land Co. (increasing capital from \$700,000 to \$800,000, recently noted vote having been affirmative.)

### Land Developments.

Ark., Blytheville.—Chicago Mill & Lumber Co.; establish park; ball grounds, tennis courts, natatorium, etc., for employees; \$15,000.

Fla., Ormond.—Dr. E. W. Grove and associates, Asheville, N. C.; will not engage in extensive developments near Ormond; recent report an error. (Lately noted as purchasing land, planning \$2,000,000 improvements, etc.)

Md., Baltimore.—Swannanoa Farms Co., 840 Equitable Bldg., inceptd.; capital \$10,000; Garfield A. Berlinsky, Ralph B. Cass, Saml. J. Rossen.

Md., Frederick.—Memorial Park.—City; construct memorial park; vote July 6 on \$50,000 bonds. Address The Mayor.

N. C., Winston-Salem.—Highland Development Co., organized; Ray Johnson; develop 60 acres adjoining city; construct sewers, sidewalks, streets; total cost \$100,000; Hinshaw & Zigler, Engrs. (Lately noted inceptd., capital \$125,000.)

Tex., Temple.—Lake View Cemetery Co., inceptd.; capital \$15,000; W. G. Jones, J. B. Daniel, C. D. Seybold.

### Lumber Manufacturing.

Ala., Tuscaloosa.—E. E. Compton, Memphis, Tenn.; establish hardwood sawmill.

Ark., Bradley.—Superior Lumber Co. inceptd.; capital \$10,000; J. H. Starling, B. B. McGee, V. A. Brown.

Ark., Little Rock.—Arkmo Lumber Co.; increased capital from \$300,000 to \$400,000.

Ark., Monticello.—Bewley & Porter Lumber Co. inceptd.; capital \$60,000; B. W. Bewley, Prest.; erect sawmill.

Fla., Apopka.—Consumers' Lumber & Veneer Co.; rebuild burned plant; loss \$60,000.

Fla., Ehren.—Ehren Pine Co., F. E. Muelhorn, Prest.; rebuild burned plant; loss \$125,000.

Fla., Inverness.—W. R. Herron; has building; install sawmill; mfr. hardwood lumber.

Fla., Sarasota.—Duncan Lumber Co. inceptd.; capital \$75,000; J. D. Stafford, Prest., Tampa, Fla.; J. F. Burkett, V.-P.; J. M. Duncan, Secy.-Treas.; both Sarasota; erect sawmill.

Ga., Adel.—Cook Lumber Co. organized; J. A. L. Powell, L. P. Booth, W. M. Tyson; establish mfg. plant and lumber mill.

Ky., Danville.—C. S. Lyons; install planing mill, woodworking and ice plants; has building.

Ky., Louisville.—B. W. Hughes Timber & Lumber Co. inceptd.; capital \$100,000; B. W. and Allen Hughes, John H. Chandler.

Ky., Viper.—Jefferson Lumber Co., Louisville, Ky.; acquired timber tract; develop.

Ky., Whitesburg.—A. C. Burton, Matoaka, W. Va.; install mills; daily capacity 15,000 ft.; purchased timber tract.

La., Selma.—Grant Timber & M'g. Co. of La., A. H. Whitmarsh, Secy., Texarkana, Ark.; erect 2 band and resaw mills; frame metal covered mill construction; install mchy.; purchased; daily capacity 35,000 ft. hardwood, 65,000 ft. pine; Thrall & Shea, Contrs.; F. E. Thrall, Archt.; both Lake Charles, La.

Md., Luke.—W. G. Sigler Planing Mill, Contr.-Bldr.; rebuild burned plant; loss \$50,000.

Miss., Bond.—North Lumber Co.; rebuild burned sawmill.

Miss., Brookhaven.—Lincoln County Lumber Co.; rebuild burned plant; loss \$85,000.

Okl., Cement.—Cement Lumber Co. inceptd.; capital \$20,000; Jno. M. McCrawley, W. P. Sullivan, J. P. McKenna.

Tenn., Memphis.—F. T. Dooley Lumber Co.; increased capital from \$20,000 to \$100,000.

Tenn., Memphis.—Walsh Lumber Co. inceptd.; capital \$50,000; J. T. Walsh, Jr., J. R. and Robert W. Findlay.

Tex., Houston.—Kirby-Bonner Lumber Co. increased capital from \$1,000,000 to \$1,750,000.

Tex., Houston.—Staves.—Lucas E. Moore Stave Co. of Texas, 3415 Audubon Place, organized; W. K. Knox, Prest.; Lucas E. Moore, V.-P.; W. L. Drummond, Secy.-Treas.-Mgr.; install 2 stave buckers. (Lately noted inceptd., capital \$25,000.)

Virginia.—J. H. N. Cobb, Sapulpa, Okla.; install mill; quarter-saw red and white oak timber. (See Machinery Wanted—Sawmill.)

### Metal-Working Plants.

Ky., St. Matthews.—Switch and Signal.—Kentucky Switch & Signal Co. inceptd.; capital \$16,000; R. V. Cheatham, Richard R. and W. E. Scroggan.

N. C., Denton.—Fireless Cookers.—Royal Metalware Mfg. Co., Hankins Bldg., organized; capital \$50,000; J. O. Garner, Prest.; Jno. L. Snyder, V.-P. and Mgr.; mfr. fireless cookers.

Okl., Tulsa.—Burners.—Pirdun Burner Co. inceptd.; capital \$150,000; C. E. E. Thompson, L. Pirdun, F. G. Viger.

Tenn., Nashville.—Light Reflectors.—Mohrlite Co. of America, Urbana, O., inceptd.; capital \$300,000; R. C. Giles, C. W. Hanchette, Jno. Early; establish factory for light reflectors.

### Mining.

Ga., Rome.—Iron, etc.—Telford Mining Co. inceptd.; capital \$30,000; C. Wilbur Zimmerman, Mobile, Ala.; Newton C. Farr, Chicago, Ill.; Richard M. Hoffman, Manistee, Mich.

Miss., Ackerman.—Ball Clay.—Mississippi Oil & Gas Co-operative Joint Stock Co., J. M. Chaffee, Mgr.; develop ball clay; air-dry, select and remove discolored portions.

S. C., Greenwood.—Gravel.—Georgia-Carolina Gravel Co. inceptd.; capital \$150,000; J. P. Abney, Prest.; W. A. Todd, Secy.-Treas.

Va., Abingdon.—Manganese.—Eyre Ferro-Manganese Corp.; increased capital \$100,000 to \$200,000.

### Miscellaneous Construction.

Ark., Blytheville.—Natatorium.—Chicago Mill & Lumber Co.; construct natatorium, tennis courts, ball grounds, etc., for employees; \$15,000.

Fla., Jacksonville.—Municipal Docks.—City Comsn., Jno. S. Bond, Chrmn., wires Manufacturers Record: Anticipate improving facilities municipal docks; plans undecided; cost not determined. (Supersedes recent item.)

Ky., Addison.—Lock.—U. S. Engineer Office, Louisville, Ky.; construct lock and abutment for dam No. 45, Ohio River; bids until Apr. 16. (See Machinery Wanted—Lock Construction.)

Ky., Lexington.—Skating Rink.—V. K. Dodge and Fred Bryant; erect 100x270-ft. skating rink; \$70,000; construction by owners. Lately noted to erect. (See Machinery Wanted—Skates.)

Md., Hagerstown.—Lake.—City; city park lake construction; voted \$20,000 bonds. Address The Mayor.

Miss., Greenville.—Levee.—Mississippi Levee Comms.; construct 200,000 cu. yds. levee; bids until Apr. 16; W. L. Thompson, Chief Engr. (See Machinery Wanted—Levee Construction.)

Miss., Gulfport.—Municipal Pier.—City Comms.; construct municipal pier; vote on \$15,000 bonds.

Miss., Jackson.—Lake.—City Comsn.; construct \$6000 lake at Livingston Park; concrete banks; cover 8 acres; contract let.

Mo., Kansas City.—Swimming Pools.—City Park Board; let contracts: Washington Square pool, 60x80 ft., Hoover Bros., \$4772; West Terrace pool, 80x80x80 ft., triangular shape, W. D. Boyle Construction Co., \$6335.

Okl., Oklahoma City.—Mausoleum.—Fair-lawn Cemetery Assn.; erect 60x120-ft. concrete, marble and stone mausoleum; tile roofing; marble flooring; \$150,000; Bailey & Alden, Archts., 1207 Colcord Bldg.

Tex., Sherman.—Mausoleum.—Sherman Mausoleum Assn.; erect 150x30-ft. mausoleum; stone and marble construction; contain 400 crypts; \$100,000; C. E. Bryan, Archt., Chicago.

Tex., Waco.—Heating Plant.—Methodist Orphanage, W. F. Barnett, Supt.; erect 30x65-ft. heating and laundry plant; reinforced concrete construction; \$45,000; install 2 large and 1 smaller boilers; contracts let; Milton W. Scott, Archt.

### Miscellaneous Enterprises.

Ala., Birmingham.—Fire Apparatus.—City; install alarm systems; \$275,000; Gamewell Fire Alarm & Telegraph Co., Contr., Newton Upper Falls, Mass. (Previously noted voted bonds.)

Ala., Mobile.—Potato Curing.—F. A. Ames; erect sweet-potato curing-house; 2500 bu. capacity.

Ala., Mobile.—Building Material.—Phillips Mfg. Co. inceptd.; capital \$10,000.

Ala., Montgomery.—Plumbing.—Little Plumb-

ing Co. inctpd.; capital \$5000; Thomas M. Little.

Ala., Sheffield—Plumbing.—Colvin Supply Co. inctpd.; capital \$25,000; A. H. Colvin.

Ark., Fort Smith—Printing.—Interstate Printing Co. inctpd.; capital \$50,000; Herman Scott, S. A. Connaughton, B. B. Boyd.

D. C., Washington—Laundry.—Dupont Laundry; erect 1-story 28x60-ft. addition to laundry; ordinary construction; \$6000; Andrew Murray, Contr., 729 12th St. N. W.

Fla., Bradentown—Fire Equipment.—City; install additional fire equipment; voted \$1500 bonds. Address The Mayor.

Ga., Cedartown—Laundry.—Cedartown Cotton & Export Co.; erect laundry; install mchy.; purchased.

Ga., Lyons—Potato Curing.—Toombs Potato & Produce Co. inctpd.; capital \$10,000; R. R. Tucker, S. L. Sharpe, J. P. Brown.

Ga., Sparta—Laundry.—D. W. Pinkston; establish steam laundry; contemplated. (See Machinery Wanted—Laundry Equipment.)

Ga., Toccoa—Fire Department.—City; plans to establish fire dept. Address The Mayor.

La., New Orleans—Enameling.—Geo. W. Ketteringham, Archt., 1023 S. Milan St.; establish plant to enamel metalware, including plumbing fixtures. (See Machinery Wanted—Enameling Equipment; Metalworking Machinery; Plumbing Supplies.)

Md., Baltimore—Publishing.—Maryland Farmer Publishing Co., 413 E. Baltimore St. inctpd.; capital \$50,000; John E. Raine, J. William Hill, Edward H. Burke.

Md., Baltimore—Engineering.—M. H. Avram & Co., 607 Calvert Bldg., inctpd.; Edmund S. Hawley, Ferdinand H. Butchorn, Rodney V. W. Vanderwoort.

Md., Baltimore—Printing.—Morgan & Rohr, 408 E. Pratt St., inctpd.; capital \$100,000; Grover C. Morgan, Charles H. Rohr, Joseph P. Stockett.

Md., Baltimore—Advertising.—Automatic Illuminated Advertising Corp., 816 W. North Ave., inctpd.; capital \$200,000; Lester G. Matthews, F. Allen White, Herman Norwood.

Md., Cumberland—Laundry.—Crystal Laundry Co.; erect 130x284-ft. building; brick, concrete and steel construction; \$200,000; build garage and separate power-house; install boilers, engines, laundry equipment; Thos. W. Biddle, Archt., Clark-Keating Bldg. (See Machinery Wanted—Boilers; Engines; Steel Sash; Laundry Equipment.)

Miss., Gulfport—Fire Equipment.—City Comms.; install additional fire-fighting equipment; vote on \$15,000 bonds.

Miss., Jackson—Potato Curing.—Farmers' Potato Curing Corp. chartered; capital \$15,000; R. H. Green, S. J. Taylor, R. L. Nelson.

Miss., Meridian—Stockyards.—Meridian Stock Yard Co. organized; capital \$100,000; A. D. Simpson, Pres.; Jas. Bozeman, Secy.

Mo., Poplar Bluff—Publishing.—Texas Publishing Co. inctpd.; capital \$1,000,000; L. E. Tedrick, H. O. Harrawood, Robt. I. Cope.

N. C., Winston-Salem—Police Alarm.—City; W. H. Holcomb, Clerk; install police alarm and telephone system; vote on \$25,000 bonds.

Okla., Muskogee—Construction.—Froebe-Briscoe Construction Co. inctpd.; capital \$50,000; W. M. Briscoe, W. F. Froebe, E. E. Gravelle.

Okla., Nowata—Publishing.—Nowata Times Publishing Co. inctpd.; capital \$10,000; E. E. Sams, Sam R. Braselton, A. T. Anglin.

Okla., Oklahoma City—Bindery.—Keystone Bindery Co. inctpd.; capital \$10,000; Ernest Dornaus, Maud Fligg, Frank Moore.

S. C., Marion—Laundry.—Rainbow Laundry Co. inctpd.; capital \$10,000; T. E. Fore, Pres., Treas.; Jos. Lieberman, Secy.

Tex., Abilene—Laundry.—State Epileptic Colony; rebuild burned laundry plant; loss \$50,000.

Tex., Bastrop—Printing.—Bastrop Printing Co. inctpd.; capital \$6500; R. P. Perkins, J. H. Pearcey, T. W. Cain.

Tex., Cisco—Transportation.—Eastland County Transportation Co. inctpd.; capital \$5100; F. A. Van Deren, C. M. Lewis, James Hardie.

Tex., Dallas—Laundry.—American Laundry Co. inctpd.; capital \$100,000; A. E. and C. A. Mangold, E. W. Morten.

Tex., Fort Worth—Electrical.—Otto Electric Co. inctpd.; capital \$135,000; L. S. and C. S. Otto, Lee Jones.

Tex., Galveston—Publishing.—Press Publishing Co., 715 American National Insurance Bldg. (lately noted inctpd., capital \$4000), organized; Henry O'Dell, Pres.; Clyde C. Stogner, V.-P. and Mgr.; Geo. P. Prendergast, Secy.; building plans undetermined; install printing plant; daily capacity 15,000 circulation. (See Machinery Wanted—Printing Plant.)

Tex., Gorman—Laundry.—Gorman Steam Laundry inctpd.; capital \$22,000; M. Scales, W. L. Allen, B. F. Read.

Tex., Houston—Publishing.—Contractor Publishing Co. inctpd.; capital \$8000; Eli Marks, C. D. Waide, Hugh Potter.

Tex., Palacios—Mud Shell.—Palacios Shell Co., R. G. Palmer, Mgr.; erect shell dredging and loading plant; \$100,000; construction by owner; P. C. Zorn, Constr. Engr. (Lately noted increasing capital to \$75,000.)

Tex., Waco—Laundry, etc.—Methodist Orphanage, W. F. Barnett, Supt.; erect 30x65-ft. laundry and heating plant; reinforced concrete construction; \$45,000; contract let; Milton W. Scott, Archt.

Tex., Waco—Laundry.—Progress Laundry. D. P. Wallace; erect 1-story 100x165-ft. concrete building; pitch and gravel roofing; cement floor; \$30,000; bids opened Apr. 15; E. M. T. Ross, Archt. (Lately noted to erect plant.)

Va., Blackstone—Electrical.—W. M. White; organize company; install isolated electric-lighting and water systems. (See Machinery Wanted—Electric-light System, etc.)

Va., Norfolk—Mineral Water.—Beaver Mineral Springs inctpd.; capital \$250,000; Aleu L. Baxter, Pres.; J. Walter Land, Secy.

Va., Norfolk—Laundry.—Dixie Laundry Corp. chartered; capital \$100,000; W. Ludwell Baldwin, Pres.; Herman H. Furr, Secy.

W. Va., Morgantown—Laundry.—Morgantown Laundry inctpd.; capital \$50,000; I. M. Austin, Aaron J. Garlow, William E. Arnett; erect \$18,000 plant; install mchy.

### Miscellaneous Factories.

Ala., Mobile—Batteries.—Service Battery Co. inctpd.; capital \$4000; Arthur B. Abrams.

Ark., Jonesboro.—Sigler-Johnson Mfg. Co. inctpd.; capital \$20,000; Geo. W. Sigler, Fay V. Johnson, Paul Smith.

Fla., St. Augustine—Confectionery.—St. Augustine Confectionery Co., Thos. Pilleades, Pres., 14 Cathedral Pl.; establish candy factory; has building; install \$5000 mchy.; daily output 1000 lbs. (Supersedes recent item.)

Ga., Americus—Ice-Cream.—Americus Ice-Cream Co. organized; J. A. Cooper, I. E. and R. C. Wilson, all Savannah, Ga.; establish ice-cream plant; mchy. ordered.

Ga., Dalton—Monuments.—Hill Bros. Marble & Granite Co. inctpd.; capital \$5000; Jno. B. and Richard M. Hill.

Ga., Port Wentworth—Peanut Products.—Stebbins Co., Harry R. Warfield, Pres., Savannah, Ga.; acquire 4-story mill structure;

improve; install mchy. for hulling and sorting peanuts.

Ga., Savannah—Leather Goods.—Moyle Trunk & Bag Co. inctpd.; capital \$100,000; Edward W. Moyle, Thomas A. Jones, Troy T. Rimes.

Ga., Savannah—Stemmers.—Southern Leaf Tobacco Co., Thos. E. Fearon, representative, New York; lease building; establish stemmery.

Ga., Tifton—Redrying Tobacco.—Imperial Tobacco Co. of Great Britain and Ireland; erect 130x600-ft. redrying tobacco factory building; mill construction; \$170,000; Spooner & Cauthen, Contrs., Tifton; C. C. Davis, Archt., Richmond, Va. (Lately noted.)

Ky., Ashland—Overalls.—Sam Lipsitz; establish overall factory.

Ky., Elizabethtown—Coca-Cola.—Coca-Cola Bottling Works inctpd.; capital \$20,000; Luke S., Martin L. and Paul F. Schmidt.

Ky., Lexington—Beverages.—Weidemann Brewing Co., J. L. Richardson, Mgr. Mill and Mine Sts.; extend plant; increase floor space; remodel lower floor.

Ky., Lexington—Underwear.—Premier Mfg. Co.; lease building to be erected by Adolph Grebel and Gus L. Heyman; 2 stories and basement; brick; \$25,000.

Ky., Lexington—Sassafras Oil.—Kentucky Sassafras Co. inctpd.; capital \$30,000; Rodman W. Keenen, Pres.; Spencer Carrick, Secy.; W. M. Parrish, Treas.; H. R. Fish, Gen Mgr.; install 70 H. P. boiler, 50 H. P. engine; mfr. sassafras oil; daily capacity 150 lbs.; leased 6000 acres in Carter and Rowan Counties.

Ky., Lexington—Candy.—So-Good Candy Mfg. Co.; increase capital from \$15,000 to \$40,000.

Ky., Louisville—Bakery.—Favorite Bakery Co. inctpd.; capital \$8000; Geo. G. and Chas. W. Stilz, W. R. Toller.

Ky., Louisville—Roofing.—Air Craft Roofing Co. inctpd.; capital \$3000; L. M. Ruze, Jr.; Fred Von Siebenthal, Jas. R. Rice.

Ky., Louisville—Bedding.—Louisville Bedding Co.; increase capital from \$200,000 to \$500,000.

Ky., Shelbyville—Coca-Cola.—Coca-Cola Bottling Works inctpd.; capital \$20,000; Paul F., Fred S. and Martin L. Schmidt.

Ky., Somerset—Coca-Cola.—Somerset Coca-Cola Bottling Co. inctpd.; capital \$10,000; S. Jones, Chas. Mitchell, C. C. Clark.

Md., Baltimore—Tea.—Federal Tea Co., 719 Key Highway, inctpd.; capital \$50,000; Herbert E. Collins, Geo. Altvater, Harry C. Zulauf.

Md., Baltimore—Cereal Sugar.—Baltimore Pearl Hominy Co., foot Howard St.; build large plant; mfr. sugar from cereals, principally corn; process of Arthur W. Smith, chemist for company.

Md., Baltimore—Cereal Sugar.—General Food Products Co., New York; build several Southern plants to mfr. sugar from cereals.

Md., Baltimore—Envelopes.—Commercial Envelope Co., 211 S. Sharp St., inctpd.; capital \$30,000; Wm. G. Albrecht, Preston G. Wright, J. Francis Hock.

Md., Hagerstown—Creamery.—Sine Creamery Co., Forest Drive and Charles St., inctpd.; capital \$150,000; W. M. B. Sine, Harry E. Davison, Stephen G. Jackson.

Md., Luke—Pulp and Paper.—West Virginia Pulp & Paper Co., 200 5th Ave.; erect plant; 120x100 and 90x50 ft.; fireproof buildings; concrete and steel frame; practically a rebuilding on new site; install present mchy.; Lockwood, Greene & Co., Archts.-Engrs., 101 Park Ave.; Geo. R. Wadleigh, Constr. Engr., 200 5th Ave.; all New York. (Supersedes recent item.)



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N. C., Hickory—Creamery.—Catawba Creamery Co.; W. J. Shuford, Prest.-Mgr.; increase capital to \$300,000.

N. C., Salisbury—Bakery.—Bake-Rite Bakery, Wm. A. McFee; establish bakery; mchy. purchased; electric power.

S. C., Florence—Stemmary.—J. P. Taylor Co., Henderson, N. C.; plans erection stemmary.

N. C., Wilmington—Bags.—Regal Sack Co., New York; purchase Willard Bag Co.; increase annual output from 10,000,000 yds. to 50,000,000 yds.; add new equipment costing \$75,000; build \$20,000 corrugated-iron warehouse; H. E. Bonitz, Archt.

N. C., Winston-Salem—Bottling.—S. E. Case & Co.; erect \$25,000 building for bottling plant; J. L. Crouse, Contr.

Okla., Red Fork — Carbon Products. — Sun Light Carbon Co., P. T. Peters, Secy., 226 Lynch Bldg., Tulsa, Okla.; has building; purchased carbon mchy., dry cells, projectors, flashlights, motor brushes, etc.; C. E. Ballard, Archt.-Constr. Engr. (Supersedes recent item.)

Okla., Muskogee — Automatic Headlights. — Crank Automatic Headlight Co. incptd.; capital \$50,000; F. M. Crank, Jno. S. Barger, R. Y. Edwards.

Okla., Muskogee.—Johnston Mfg. & Supply Co. incptd.; capital \$50,000; Jno. S. Barger, R. Y. Edwards, F. M. Crank.

S. C., Branchville — Mint-Cola. — Mint-Cola Bottling Co. incptd.; capital \$5000; W. A. Dukes, Prest.; P. E. Dukes, Secy.-Treas.

S. C., Columbia—Peanut Oil.—Carolina Peanut Oil Co., 1518 Sumter St.; organized; capital \$50,000; L. S. Covin, Prest.; B. H. Bostick, Treas.; erect 100x40-ft. mill, 150x40-ft. warehouse; purchased mchy.; daily capacity 15 tons peanuts; Loyal-Covin Contracting Co., Contr. (L. S. Covin lately noted to establish mill.)

S. C., Florence—Stemmary.—China Americana Co., Rocky Mount, N. C., plans erection stemmary.

S. C., Florence — Stemmary. — Export Leaf Co., Richmond, Va.; plans erection stemmary.

S. C., Florence—Stemmary.—Imperial Tobacco Co., Richmond, Va.; plans erection stemmary.

S. C., Florence—Stemmary.—T. D. Martin; erect 225x70-ft. stemmary; \$60,000. Supersedes recent item. (See Machinery Wanted—Electrical Equipment; Building Materials.)

Tennessee — Extracts. — Tennessee Extract Corp. chartered; capital \$60,000; Chas. B. Bishop, Geo. M. Davis, A. M. Fox, all Wilmington, Del.

Tenn., Knoxville — Novelties. — University Novelty Mfg. Co. incptd.; capital \$50,000; A. L. Mason, W. T. Kolter, E. G. Heins.

Tex., Houston—Overalls.—Cyrus W. Scott Mfg. Co.; increase capital from \$700,000 to \$1,500,000.

Tex., Houston—Overalls.—Cyrus W. Scott Mfg. Co.; increase capital from \$700,000 to \$1,500,000.

Va., Bridgewater — Creamery.—Bridgewater Creamery & Ice Corp.; increase capital from \$15,000 to \$100,000.

Va., Crockett — Bottling.—Chas. F. Hagan, Bristol, Va.; erect bottling plant.

Va., Danville—Tobacco.—Pemberton & Penn; erect 4-story 96x55-ft. addition; ordinary construction; \$36,000; Heard & Chesterman, Archts.; Jno. P. Pettyjohn & Co., Contrs.; both Lynchburg, Va. (Lately noted.)

W. Va., Harpers Ferry—Chemicals.—Aeri-Farm Chemical Co. incptd.; capital \$30,000; W. H. Campbell, Baltimore, Md.; N. Spigel, Roanoke, Va.; H. L. Kirby, New York.

W. Va., Wheeling — Glass. — Central Glass

Works, Cecil Fee, Treas.; erect additional floor to main factory; remodel and convert into daylight plant; install 30,000 ton coal-consuming gas producer; total cost \$100,000; C. W. Bates, Archt.

W. Va., Charleston—Tooth Paste.—Alvatal Chemical Co. incptd.; capital \$50,000; T. A. Timberlake, S. L. Harris, A. L. Parsons.

### Motor Cars, Garages, Tires, Etc.

Ala., Camden—Automobiles.—Wilcox Motor Co. incptd.; capital \$10,000; J. R. Liddrell.

Ala., Fayette — Automobiles. — Baskett-Edwards Motor Co. incptd.; capital \$10,000; L. G. Edwards.

Ala., Florence — Automobiles.—Motor Sales Co. incptd.; capital \$10,000; Chas. F. Miller.

Ark., Camden—Garage.—N. S. Word & Co.; erect 120x100-ft. garage and display-room; concrete blocks.

Ark., Jonesboro—Farm Crop Tractor Manufacturing.—Huckabee Tractors Co. organized; Eugene Sanders, Prest.; build farm tractor works; 25-acre site; mfrs. complete crop tractors.

Ark., Mountain Home—Garage.—Eatman & Dodd; erect stone garage.

Ark., Pine Bluff—Garage.—F. G. Smart Automobile Co., W. Barraque St.; rebuild garage; loss \$50,000.

Ark., Texarkana — Automobiles.—Texarkana Overland Co.; erect salesroom; showroom 50x60 ft.; pressed brick; terra-cotta; Stewart Moore, Archt.

D. C., Washington — Garage. — Nicholas P. Chaconas; erect \$30,000 garage.

Fla., Jacksonville—Tractor Manufacturing.—Partridge Tractor Co. incptd.; capital \$100,000; W. L. Sharkey, Prest.-Mgr.; Hugh Partridge, V.-P.; W. W. Carson, Secy.-Treas.; establish plant; install mchy.; mfrs. tractors.

Fla., Key West—Garage.—Trevor & Morris incptd.; capital \$35,000; Benjamin D. Trevor, Prest.; Samuel D. W. Light, V.-P.; George F. Morris, Secy.-Treas.

Fla., Orlando—Motor Trucks.—Atlantic & Gulf Motor Express Co. incptd.; capital \$75,000; Mathem A. Marshall, Prest.; Marion S. Wiggins, V.-P.; Anna N. Turner, Secy.-Treas.

Ga., Atlanta—Automobile Manufacturing.—Simms Motor Car Corp. organized; capital \$2,500,000; Thomas H. Mars, Prest.; Jackson H. Simms, V.-P.-Sales Mgr.; Erle M. Donaldson, Secy.; erect 100x500-ft. factory building; initial daily output 25 cars; increase to 100.

Ga., Augusta—Garage.—Pollock & Johnson; occupy garage to be erected by E. J. Trheldling, Henry H. Cummings on 29x159-ft. site.

Ky., Covington—Motors.—Tri-County Motor Co. incptd.; capital \$25,000; Daniel D. Kahn, Frank P. Dietrich, Jos. A. Dietrich.

Ky., Lexington—Garage.—Flahaven Land Co., Charles E. Eveleth, Prest.; erect 43-ft. garage; stucco; terra-cotta trimmed with red brick; \$60,000; Congleton Lumber Co., Contr.; Frankel & Curtis, Archts.-Engrs.

Ky., Louisville—Motor Car Manufacturing.—Preferred Motor Car Co. incptd.; capital \$2,000,000; F. W. Young, Prest.; S. C. Bodner, Secy.; Ira C. Koehne, Ch. Engr.; all Indianapolis, Ind.; establish factory; annual output 3000 passenger and truck cars on interchangeable parts system; later plans 10,000 cars annually.

Md., Baltimore—Garage, etc.—Barrett Co., A. A. MacCubbin, Mgr., 36th St. and Gray's Ferry Ave., Philadelphia, Pa.; erect two 30x36-ft. corrugated iron garages, boiler and pump; Steward & Stevens Iron Works, Contr., Philadelphia, Pa.; Thos. Strouse, 15 E. Fayette St., Baltimore, has contract for foundation work.

Miss., Rosedale—Garage.—J. C. Brooks; erect 1-story 50x120-ft. garage; brick; wood trusses; tile floor; crystal and plate-glass; \$16,000; Mann & Gatling, Archts., 614 Scimitar Bldg., Memphis, Tenn.

Miss., Tunica — Garage. — Mann & Gatling, Archts., 614 Scimitar Bldg., Memphis, Tenn.; preparing plans for 1-story 75x150-ft. garage; brick; Carey roof; \$22,000.

N. C., Charlotte—Automobile Assembling.—Carolina Motors incptd.; capital \$150,000; J. Leak Spencer, C. B. Bryant, Claud Brown; has 1-story building; 75,000 sq. ft. floor space; glass roof.

N. C., Fayetteville—Automobiles.—Elliott McNeill Sales Co. incptd.; capital \$100,000; A. B. McMillan, G. D. Elliott, J. S. McNeill.

N. C., Mebane—Motor Cars.—Elkins Motor Car Co. organized; A. B. Elkins, Prest.-Mgr.; W. B. Elkins, Secy.; F. L. Elkins, Treas.; erect 45x112½-ft. building; ordinary construction; \$8000; building bids until Apr. 15; install lathe, milling machine, drill press, grinder, motors, boring machines, air compressor, etc. (Lately noted incptd., capital \$50,000.)

N. C., Raleigh—Motors.—Citizens Motor Service Co. incptd.; capital \$125,000; H. L. Whitaker, J. Cooper Young, T. G. Moseley.

N. C., Raleigh — Automobiles. — Bulck Sales Co. incptd.; capital \$24,000; H. J. Lee, C. D. Peebles, G. T. Fenton.

Okla., Burbank — Garage. — Burbank Garage incptd.; capital \$5000; W. S. Prosser, Eugene Ladd, Bessie Prosser.

Okla., El Reno—Automobile Repair.—Tompkins Motor Co., Chas. H. Tompkins, Mgr.; erect 2-story 50x108-ft. building; brick; concrete; bids until June 1; install automobile repair equipment; \$3000; Lee Tompkins, Bldg. Contr., Fort Worth, Tex.

Okla., Oklahoma City — Motors. — Post-Ward Motors Co. incptd.; capital \$50,000; E. J. Post, T. F. Ward, G. G. Brunson.

S. C., Columbia—Automobiles.—Davis Motor Co., 2000 Main St., organized; H. R. Mull, Prest.; C. H. Mole, V.-P.; M. B. Reid, Secy.-Treas.; erect 2-story 43x55-ft. building; brick; Marion Thomas, Contr. and Constr. Engr. (Lately noted incptd., capital \$25,000.)

S. C., Columbia—Filling Station.—C. Bardson; erect filling station and garage; galvanized iron; \$5000.

S. C., Greer—Garage.—J. T. Wood, Jr.; erect 46-ft. garage; \$5000.

Tenn., Knoxville — Motors. — Bales Motor Co. incptd.; capital \$25,000; H. G. Bales, Edgar G. Cooper, H. G. McMillin.

Tenn., Knoxville—Motors.—Briscoe-Ragsdale Motors Co. incptd.; capital \$30,000; Lucian W. Briscoe, Tomlinson M. Ragsdale, Edward J. McMillan.

Tenn., Memphis — Inner Tubes. — Memphis Compress Inner Tube Co. incptd.; capital \$250,000; R. P. Crump, T. E. Salmon, H. C. Blackmon.

Tenn., Memphis—Tires.—Akron Tire & Rubber Co. incptd.; capital \$25,000; Wm. B. Newman, Harry Kleinman, Jno. Flaunt, Sr.

Tenn., Memphis — Automobiles. — Godlove-Pryor Motor Corp. chartered; capital \$50,000; Charles Godlove, Arthur N. Seessel, Dave Derrmon.

Tex., Dallas — Garage. — Dallas Automobile Laundry & Storage Co. incptd.; capital \$300,000; Charles W. Almstead, Frank B. Richardson; both Cleveland, O.; erect 6-story garage; fireproof; concrete.

Tex., Dallas — Trucks. — General Motors Truck Co., Ralph Briggs, Mgr.; erect 6-story 100x100-ft. building; fireproof; concrete; \$125,000 to \$130,000.

Tex., Fort Worth — Tires. — Texas Arm-

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

strong Tire Co. inceptd.; capital \$20,000; W. M. Monning, E. S. Hooper, V. L. Ausitzen.

Tex., Jacksonville.—Garage.—People's Garage Co. inceptd.; capital \$7,000; J. H. Howard, J. G. Griffin, J. C. Clemons.

Tex., Oak Cliff.—Garage.—Dallas County, Chas. E. Gross, Auditor; erect garage; bids until Apr. 15.

Tex., San Antonio.—Motors.—South Texas Motors Co. inceptd.; capital \$25,000; E. P. McDonald, W. A. Bawn, W. L. Pridgen.

Va., Harrisburg.—Garage.—Harrisonburg Motor Co.; erect \$60,000 garage; fireproof.

Va., Richmond.—Automobiles.—N. E. Powers Automobile Supply Co. inceptd.; capital \$25,000; N. E. Powers, Prest.; E. M. Roscher, Secy.; C. L. Branham.

### Railway Shops, Terminals, Roundhouses, Etc.

Tex., Sherman.—St. Louis-San Francisco R. R., F. G. Jonah, Ch. Engr., St. Louis, Mo.; enlarge shops and yard; \$100,000.

### Road and Street Construction.

Ala., Birmingham.—City Comms.; paving contracts; Dunn Construction Co., \$15,939, Avenue A; H. N. Bowdry, \$3750, Eighth Court.

Ala., Butler.—W. S. Keller, State Highway Engr., Montgomery, Ala.; construct 6.3 mi. State Trunk road No. 15; 16,389 cu. yds. sand-clay surfacing; bids until May 10. (See Machinery Wanted—Road Construction.)

Ala., Demopolis.—City, J. I. Lee, Mayor; pave 14 blocks street; asphalt or Portland cement concrete; \$90,000 available; bids about May 1; Robert L. Totten, Conslt. Engr., Birmingham, Ala. (See Machinery Wanted—Paving.)

Ala., Florence.—City; construct 26,000 sq. yds. paving; sheet asphalt, vitrified brick, bitulsing, concrete, asphaltic concrete or bitulithic on macadam or concrete base; curb, gutter and drainage on Morrison and Wood Aves.; bids until April 13; W. M. Paxton, City Engr. (See Machinery Wanted—Paving.)

Ala., Russellville.—Franklin County, J. Gaisser, Supt. Public Roads; improve Jackson Highway. (See Machinery Wanted—Steam Shovel.)

Ark., Conway.—Conway-Damascus Road Improvement Dist., Faulkner County, Tom Davis, Secy.; construct 22 mi. bituminous macadam penetration method road; \$350,000 available; bids until Apr. 15; changed date from Apr. 2; Parkes Engineering Co., Engr., 201 Citizens' Bank Bldg., Pine Bluff, Ark. (See Machinery Wanted—Road Construction.)

Ark., Eldorado.—Union County; Road Improvement Dist. No. 1, W. T. Flournoy, Secy. Comms.; 21.50 mi. gravel macadam road; Dist. No. 2, D. McDonald, Secy. Comms., 54.78 mi. gravel macadam road; Dist. No. 3, J. M. Wallace, Secy. Comms., 40.32 mi. gravel road; Dist. No. 4, G. P. Sewell, Secy. Comms., 68.36 mi. gravel macadam road; bids until May 5; Ford & MacCrea, Engrs. for Dist. 1 and 2, 325 Gazette Bldg., Little Rock; Carter & Knoch, Engrs. for Dist. No. 3, 803 A. O. U. W. Bldg., Little Rock; C. S. Christian, Engr. Dist. No. 4, Texarkana, Ark. (See Machinery Wanted—Road Construction.)

Ark., Mountain Home.—Baxter County Road Improvement Dist. No. 3, Will Case, Secy., Gassville, Ark.; grade and surface 17 mi. clay-bound macadam road; \$150,000; invite new bids; rejected previous bids; Bird & Kiel, Engrs., 43 Moore & Turner Bldg., Little Rock, Ark. (Lately noted inviting bids.)

Fla., Bradentown.—City, L. L. Hine, Clerk;

pave streets; voted \$13,500 bonds. (Lately noted to vote.)

Fla., Bradentown.—City, Harry Wadham Commr. Public Works; pave streets; asphalt block; \$31,500 available; Harry Wadham, Engr. (Lately noted voting bonds.)

Ga., Atlanta.—Fulton County Comsn.; pave 1½ mi. Stewart Ave. with concrete; \$50,000; pave road from city limits to county line.

Ga., Brunswick.—Glynn County Comms. Roads and Revenues, Paul E. Twitty, Clk.; construct 4.2 mi. plain concrete road paving; Federal-aid Project No. 80; Pittman Construction Co., Contr., Atlanta, Ga.; F. E. Orton, Engr., Brunswick. (Lately noted inviting bids.)

Ga., Jesup.—Wayne County Comms., Ira M. Raybon, Clk.; construct roads; voted \$200,000 bonds. (Lately noted to vote.)

Ga., Jesup.—Wayne County Comms.; construct roads; vote on \$200,000 bonds.

Ga., Lagrange.—Troup County Comms. Roads and Revenues, W. T. Tuggle, Clk.; grade 13.24 mi. Lagrange-West Point Rd.; topsoil surfacing; \$111,000 available; O. A. Mann & Co., Contrs.; H. G. Smith, Engr. (Lately noted inviting bids.)

Ga., Savannah.—City, J. W. Motte, Director Public Works; resurface and repave W. Broad St.; 55,000 sq. yds.; bids until Apr. 22. (See Machinery Wanted—Paving.)

Ga., Talbotton.—Talbot County Comms.; construct roads; voted \$50,000 bonds. (Lately noted to vote.)

Ga., Winder.—City, Jno. T. Maynard, Mayor; pave streets; voted \$35,000 bonds. (Lately noted.)

Ga., Winder.—City, G. H. Maynard, Mayor; construct 30,000 yds. streets; \$85,000 available; J. B. McCrary Co., Engr., Atlanta, Ga. (Lately noted voting bonds.)

Ky., Owensboro.—City Comms.; improve streets; asphalt or bituminous surface; \$93,186.80.

Ky., Richmond.—City, L. P. Evans, Mayor; construct 45,000 sq. yds. sheet asphalt paving; \$222,500 available; Roy W. Burks, Contr., Louisville, Ky.; S. F. Crecelius, City Engr., Richmond, Ky. (Lately noted inviting bids.)

La., Covington.—St. Tammany Parish Good Roads Comsn.; construct 5.11 mi. shell road; \$19,959.68; R. S. Daniels, Contr.

La., Covington.—St. Tammany Parish Police Jury, J. C. Grant, Chrmn.; construct 25 mi. earth road; bids until Apr. 17; M. C. Huckaby, Engr. (See Machinery Wanted—Road Construction.)

La., Covington.—St. Tammany Parish Police Jury, J. C. Grant, Chrmn.; construct 35 mi. gravel road; bids until May 8; M. C. Huckaby, Engr. (See Machinery Wanted—Road Construction.)

La., Gretna.—State Highway Dept., New Orleans, La.; construct 2.88 mi. highway in Jefferson Parish; \$24,500; Andrew Hero, Contr.

La., Lafayette.—Lafayette Parish Police Jury, Geo. Crouchet, Secy.; improve roads in Dist. No. 1; vote May 12 on \$36,000 bonds.

La., Lafayette.—Lafayette Parish Police Jury; construct 6 mi. lateral roads in First Ward; vote May 12 on \$36,000 levy.

La., Marksville.—Avoyelles Highway Commission, J. W. Joffrion, Chrmn.; grade, drain and construct cement-concrete drainage structures on 8 mi. Moncla-Center Point Highway; bids until Apr. 27; W. E. Atkinson, Conslt. Engr. (See Machinery Wanted—Road Construction.)

La., Tallulah.—State Highway Dept., New Orleans, La.; construct 10½ mi. roadway from Tallulah to Lake Providence; \$133,192; Francis C. Constant, Contr., Alexandria, La.

La., St. Bernard.—State Highway Dept., New Orleans, La.; construct 3.25 mi. road between New Orleans and Pointe a la Hache; \$73,280; Cope & Williams, Contrs., New Orleans.

Md., Chestertown.—Kent County Commissioners, John Medders, Clerk; resurface 1.55 mi. roadbed; \$9030; Sutton Contract Co., Contr., Philadelphia, Pa.

Miss., Clarksdale.—City Comms., R. E. Stratton, Jr., Clk.; improve streets; construct 2d St. bridge; reservoir, etc.; voted \$500,000 bonds. (Lately noted to vote.)

Miss., Lexington.—City; pave streets; vote on \$32,000 bonds. Address The Mayor.

Miss., Meadville.—Franklin County Suprs., J. M. Reynolds, Clk.; construct 80 mi. gravel roads; \$400,000 available; Contrs., Jones-Miller Construction Co., Crystal Springs, Miss., and J. R. Parker, Lyon, Miss.; other contracts let for 40 mi. road; Geo. C. Hoskins, Engr., Meadville. (Lately noted inviting bids.)

Mo., Independence.—Jackson County Commissioners; construct 3 mi. Lone Jack East Rd.; bituminous macadam; \$74,996.92; bids until Apr. 19; A. W. Graham, State Highway Engr., Kansas City, Mo. (See Machinery Wanted—Road Construction.)

Mo., Springfield.—Greene County Comms.; defeated \$1,500,000 bonds. (Lately noted to vote.)

Mo., West Plains.—Howell County, Ward Ellis, Clk.; plans 350 to 400 mi. road; grade and gravel 50 mi. road; bids until Apr. 23; changed date from Mch. 30; \$620,000 available; A. V. Elston, Engr. (See Machinery Wanted—Road Construction.)

N. C., Asheville.—State Highway Coman., Raleigh, N. C.; construct 2.2 mi. concrete pavement on Charlotte-Asheville highway; State-aid Project 77; \$91,000; E. T. Belote, Contr.

N. C., Blowing Rock.—Town Comms.; defeated \$15,000 street-improvement bonds. (Lately noted to vote.)

N. C., Fayetteville.—City, John Underwood, Mayor; construct 25,000 sq. yds. sheet-asphalt paving; 10,000 sq. yds. bituminous macadam; American Contracting Co., Contr., Moultrie, Ga.; E. C. Derby, City Engr., Fayetteville. (Supersedes recent item.)

N. C., Fayetteville.—City, John Underwood, Mayor; pave Hay and Gillespie Sts.; American Contracting Co., Contr., Moultrie, Ga.; E. C. Derby, City Engr.

N. C., Hertford.—Perquimans County Commissioners; construct hard-surface roads; vote on \$300,000 bonds.

N. C., Kenansville.—Duplin County Comms.; construct 12 mi. gravel highway from Kenansville to Sampson County line; grading and bridges; \$78,000; have let contract. (Lately noted inviting bids.)

N. C., Smithfield.—Johnston County Commissioners; construct 6 mi. gravel road; 4 concrete bridges; \$50,000; R. P. Asheley, Contractor. (Lately noted inviting bids.)

N. C., Whiteville.—Columbus County Commissioners; construct 18 mi. Wilmington-Charlotte-Asheville Highway; gravel; grading and bridges; \$163,000; construction by county. (Lately noted inviting bids.)

Okla., Mangum.—City, G. F. Border, Mayor; pave 30 blocks street; \$600,000; Johnson & Benham, Conslt. Engrs., Oklahoma City, Okla. (Lately noted.)

Okla., Tulsa.—Tulsa County Comms.; grade and drain 10½ mi. State Highway between Owasso and Washington County line; construct 7 bridges; invite bids.

S. C., Abbeville.—Abbeville County Comms.; construct 150 mi. topsoil roads; voted \$450,000 bonds. (Lately noted to vote.)

Tenn., Alamo.—Tennessee Dept. Highways, Nashville, Tenn.; construct 5.666 mi. State Highway No. 35 between Alamo and Bells; Mid-Continent Construction Co., Contr., Nashville, Tenn.; O. F. Goetz, Engr., Alamo. (Lately noted inviting bids.)

Tenn., Chattanooga.—Hamilton County Commrs.; repair roads; \$20,000.

Tenn., Chattanooga.—Hamilton County Commrs., Sam A. Conner, Judge; repair 11 mi. concrete pike roadway; Federal-aid Project; E. G. Murrell, Engr. (Lately noted.)

Tenn., Columbia.—Tennessee Dept. Highways, Nashville, Tenn.; construct 11.872 mi. State Highway No. 10 between Williamson County line and Columbia; 138,277 sq. yds. bituminous macadam or rock asphalt surface course; bridge over 20-ft. span; 86,670 lbs. structural steel; bids until May 5; W. P. Moore, Ch. Engr., Nashville, Tenn. (See Machinery Wanted—Road Construction.)

Tenn., Erwin.—Unicoi County Commrs.; construct road to Madison County; \$300,000 available.

Tenn., Hohenwald.—Tennessee Dept. Highways, Nashville, Tenn.; construct 20.466 mi. State Highway No. 1 in Lewis and Lawrence counties; Stephens, Lomax & Schwendemann, Contrs., Hohenwald; Geo. Yavroumis, Engr., Hohenwald. (Lately noted inviting bids.)

Tenn., Union City.—Obion County Commrs.; construct Jefferson Davis highway from Troy to Dyer County line; voted \$150,000 bonds; \$300,000 available.

Tex., Boerne.—Kendall County Commrs.; construct roads in Dist. No. 4; voted \$40,000 bonds. (Lately noted to vote.)

Tex., Brownsville.—Cameron County Commissioners; construct 10 mi. hard-surfaced road; W. T. Montgomery, Contr., San Antonio, Tex. (Lately noted to vote on bonds.)

Tex., Coleman.—Coleman County, L. G. Matthews, Judge; construct 42.17 mi. crushed rock or gravel road in Precinct No. 2; 110,000 cu. yds. crushed rock or gravel; 116,715 lbs. reinforcing steel; bids until Apr. 14; W. E. Dickerson, County Engr. (See Machinery Wanted—Road Construction.)

Tex., Denton.—Denton County Commrs.; construct Denton-Roanoke, Denton-Pilot and Denton-Sanger sections of State Highway; \$654,531; McElwrath & Rogers, Contrs., Corsicana, Tex.; Bryant & Huffman, County Engrs., Littlefield Bldg., Austin, Tex., and Denton.

Tex., Fabens.—El Paso County Commrs., El Paso, Tex.; construct 11 mi. gravel and macadam roads; \$100,000; El Paso Bitulithic Co., Contr., El Paso, Tex.

Tex., Rockdale.—Milam County Commrs., Cameron, Tex.; surface 4 mi. Rockdale-Kolb road; Rice & Wiedner, Contrs.

Tex., Madisonville.—City; improve streets; sold \$10,000 warrants. Address The Mayor.

Va., Appalachia.—Town; improve roads; vote April 20 on \$300,000 bonds. Address The Mayor.

Va., Big Stone Gap.—Town, W. J. Horsley, Mayor; construct road from Big Stone Gap to Duffield; vote April 20 on \$300,000 bonds. (Lately noted.)

Va., Lynchburg.—Joint Comm. on Streets, Street Cleaning and Sewers, N. B. Handy, Chrmn.; pave Jefferson and 9th Sts.; 2800 sq. yds. concrete; 2800 sq. yds. granite block, bituminous and gravel filler; bids until Apr. 20; C. L. De Mott, City Engr. (See Machinery Wanted—Paving.)

Va., South Boston.—Town, W. L. Penick, Mayor; pave 16,000 sq. yds. on Main and other streets; sheet asphalt; \$12,000; John J. Curley, Contr., Richmond, Va. (Lately noted inviting bids.)

W. Va., Fayetteville.—Fayette County Commrs., C. E. Mahan, Clerk; grade and drain 5.7 mi. road in Mountain Cove Dist.; 7 mi. road in Quinnimont Dist.; bids until May 3; J. K. McGrath, Road Engr. (See Machinery Wanted—Road Construction.)

W. Va., Fayetteville.—Fayette County Commrs.; grade 7 mi. road in Kanawha Dist., between Montgomery and Deepwater; \$75,227.50; Rondech Construction Equipment Co., Contr. (Lately noted inviting bids.)

W. Va., Hinton.—Summers County Commissioners; improve roads in Union Dist.; voted \$88,000 bonds.

W. Va., Bluefield.—City; pave Center and other streets; Randich Construction & Equipment Co., Contr. (Lately noted issuing bonds.)

W. Va., Buckhannon.—City; pave Kanawha, Spring and other streets; vote May 4 on \$50,000 bonds. Address The Mayor.

W. Va., Charles Town.—City; improve streets; vote on \$10,000 bonds. Address The Mayor.

W. Va., Morgantown.—Monongalia County Commrs.; grade and pave 6.67 mi. Fairmont Pike with concrete; 16 ft. wide; \$365,402; Cole Brother Construction Co., Contr. (Lately noted inviting bids.)

### Sewer Construction.

Ga., Swainsboro.—City; construct sewer system; voted \$25,000 bonds. Address The Mayor.

Ga., Winder.—City, Jno. T. Maynard, Mayor; construct sewer system; voted \$17,000 bonds.

Ga., Winder.—City, Jno. T. Maynard, Mayor; extend sewer system; \$15,000; J. B. McCrary Co., Engr., Atlanta, Ga. (See Machinery Wanted—Pipe.)

La., Natchitoches.—City, W. F. Johnson, Mayor-Commr.; install sanitary sewer system; construct and equip water and light plant; extend water and light lines; voted \$240,000 bonds.

Miss., Louisville.—Town, G. W. E. Bennett, Clerk; repair and improve sewer and water systems; voted \$10,000 bonds. (Lately noted to vote.)

Mo., Carthage.—City, J. W. Sartwell, Mayor; construct \$50,000 sewer system.

N. C., Cherryville.—Town, J. B. Houser, Mayor; construct sewer system and disposal plant; \$70,000; Carolina Engineering Co., Engineer, 412 Southern Bldg., Wilmington, N. C.; Tucker & Laxton, Contrs. for sewers, Charlotte, N. C.; Dysard Construction Co., Contrs. for disposal plant, Atlanta, Ga. (Lately noted bids until Apr. 8.)

N. C., Farmville.—Town, T. E. Joyner, Clerk; construct sewer system; \$15,000 bonds.

N. C., Mebane.—Town, W. S. Crawford, Mayor; construct \$64,427 sewer system; 8-mi. vitrified pipe sewers; \$17,037; other contracts later; contracts let; Wm. M. Platt, Engr., Durham, N. C. (Lately noted bids until Apr. 6.)

N. C., Mt. Holly.—City; construct \$40,000 sewer system; Klutz & Smith, Engrs., Concord, N. C.

N. C., Spencer.—City; construct 7 mi. sewer system; J. B. McCrary Co., Engr., Atlanta, Ga.

N. C., Winston-Salem.—City, W. H. Holcomb, Clk.; enlarge sewer system; issue \$15,000 bonds.

S. C., Anderson.—Equinox Mills; install sewer and water supply systems in mill village for 150 homes; J. E. Sirrine, Archt.-Engr., Greenville, S. C.

S. C., Anderson.—Gluck Mills; plans in-

stallation sewer and water supply systems in mill village for 150 homes; J. E. Sirrine, Archt.-Engr., Greenville, S. C.

S. C., Charleston.—Street Department; lay 17,000 ft. 6 to 30-in. terra-cotta pipe sewer; 16,000 ft. 6 to 30-in. terra-cotta pipe drain; 5600 ft. reinforced concrete drain; bids until May 4; J. H. Dingle, City Engr. (See Machinery Wanted—Sewers, etc.)

Tenn., Humboldt.—City, R. H. McNeely, Mayor; improve sanitary sewer system; J. H. Weatherford, Constl. Engr.; Speed & Kearney, Contrs.; all Memphis, Tenn. (Lately noted bids until Mch. 31.)

Tex., Dallas.—City, Frank W. Woxenrafft, Mayor; construct \$70,000 sewer system; voted \$400,000 bonds. (Lately noted to vote.)

Va., Coeburn.—Town; plans construction sewer system. Address The Mayor.

W. Va., Huntington.—City Commrs., Mat. Miser, Commr. Streets, Sewers, etc.; construct 12-in. vitrified tile lateral sewer in alley between Merrill and 3d Aves.; 12-in. vitrified tile lateral sewer on Railroad Ave.; bids until Apr. 10; A. B. Maupin, City Engr. (See Machinery Wanted—Sewer Construction.)

### Shipbuilding Plants.

Fla., St. Andrews — Ships. — St. Andrews Marine Rwy. Co. inceptd.; capital \$50,000; W. D. Miller, Prest.; W. S. Montes, V.-P.; W. E. Tiller, Secy.-Treas.

Md., Baltimore.—Steel Vessels.—Globe Shipbuilding & Dry Dock Co. of Maryland, B. C. Cooke, Prest., Fidelity Bldg., has plans and specifications for shipyard; erect 1½-story 50x150-ft. office building; frame; construction by owner; 1-story steel construction 50x103-ft. mold loft, 50x150-ft. joiler shop, 30x110-ft. power-house, 450x60-ft. plate and angle shop; Bancroft-Jones Co., Contr., Buffalo, N. Y.; 365x140x50-ft. machine shop, steel construction; McClintic-Marshall Co., Contr., Pittsburgh, Pa.; build all-steel 29,000-ton cargo vessels; C. Danielsens, Naval Archt. (Additional to previous item.)

S. C., Charleston.—Yachts.—Zoray da Yacht Co. inceptd.; capital \$30,000; F. Leroy Pinkusshon, Prest.; J. Henry Stuhler, V.-P.; William Doscher, Secy.-Treas.

### Telephone Systems.

Ala., Mobile.—Southern Bell Telephone & Telegraph Co., G. C. Bowden, Dist. Mgr.; remodel building; \$100,000; improve first floor for offices; second floor for dining and rest-rooms, etc.; extend cables; \$90,000; Barge-Thompson Co., Engr.-Contr., Atlanta, Ga.; Baerman-Hugenot Co., Electrical Contr.; National Mosiac Tile Co., Contr., tile and marble; both Mobile. (Previously noted to improve building.)

Ala., Oxford.—Buckhorn Telephone Co. inceptd.; capital \$3000; D. C. Cooper.

Mo., St. Louis.—Southwestern Bell Telephone Co., E. D. Nims, Prest.; issue \$50,000,000 common and \$25,000,000 preferred stock; financing merger of its interests in Mo., Kan., Ark., Okla. and Texas.

N. C., Winston-Salem.—City; W. H. Holcomb, Clk.; install telephone system and police alarm; vote on \$25,000 bonds.

Tex., Hebronville.—Hebronville Telephone Co. inceptd.; capital \$4200; Sixto and S. E. Garcia, Manuel Oliveez.

Va., Gretna.—People's Mutual Telephone Co. inceptd.; capital \$5000; O. L. Ramsey, Prest.; R. T. Ramsey, Secy.

### Textile Mills.

Ala., Alexander City.—Underwear Yarns.—Russco Mills organized by Russell Mfg. Co.;



capital \$500,000; Benj. Russell, Prest.; erect mill; install 11,856 spindles.

Ga., Columbus—Webbing.—Georgia Webbing & Tape Co. organized; Jno. S. Roberts, Prest.; M. B. Roberts, Secy.; C. M. Young, Treas.; has building; install 6 narrow looms; 15 H. P. electric power; daily output 1000 lbs. (Lately noted inceptd., capital \$10,000.)

Ga., Marietta—Hosiery Yarns.—Marietta Cotton Mills organized; capital \$75,000; W. F. Hetrick, Prest.; W. E. Schilling, Secy.-Treas.; erect 3-story 100x80-ft. brick-mill construction building; \$25,000; install 3000 spindles; \$10,000 mchy.; 120 H. P. electric power; belt drive; daily capacity 500 lbs. hosiery yarn. (Super-sedes recent item.)

N. C., China Grove — Cotton Products.—China Grove Cotton Mills Co. inceptd.; \$1,000,000; C. B. Miller, China Grove; A. E. Davis, Salisbury, N. C.; P. M. Barger, Mooresville, N. C.

N. C., Kannapolis—Cotton Products.—Cannon Mfg. Co.; erect additional cotton mill.

N. C., Mooresville — Cotton Products.—Mooresville Cotton Mills; build 2-story 160x75-ft. dyehouse and bleachery; reinforced concrete construction; electric power; extend boiler plant; add 1500 H. P. equipped with stokers and coal-handling apparatus; equipment purchased; J. E. Sirrine, Archt.-Engr., Greenville, S. C.

N. C., Patterson—Hosiery Yarns.—Watts Cotton Mill Co.; increase capital from \$250,000 to \$400,000.

N. C., Raleigh—Cotton Products.—Pilot Cotton Mills; erect dye plant addition; J. E. Sirrine, Archt.-Engr.; Gallivan Building Co., Contr.; both Greenville, S. C.

S. C., Anderson—Yarns.—Riverside Mfg. Co.; increase capital from \$600,000 to \$1,000,000.

S. C., Columbia—Press Cloth.—F. T. Parker Co., F. T. Parker, Propr.; erect 106x86-ft. brick mill-construction building; \$25,000; install \$10,000 additional mchy.; electric power; mfr. oil-press cloth; La Faye & La Faye, Archts.-Engrs. Supersedes recent item. (See Machinery Wanted—Piping.)

### Water-Works.

Ark., Hot Springs—Army Hospital, Constructing Quartermaster's Office; extend water system.

Ga., Metter.—City; construct water-works and pumping plant; voted \$35,000 bonds; J. B. McCrary Co., Engr.-Contr., Atlanta, Ga.

Ga., Swainsboro.—City; construct water-works; voted \$50,000 bonds. Address The Mayor.

Ga., Toccoa.—City; improve water system; increase pressure. Address The Mayor.

Ga., Winder.—City, Jno. T. Maynard, Mayor; extend water mains; \$2000.

La., Natchitoches. — City, W. F. Johnson, Mayor-Commr.; construct and equip water and light plant; extend water and light lines; install sanitary sewer system; voted \$240,000 bonds.

Miss., Clarksdale. — City Commrs.; improve water and light systems and streets; voted \$500,000 bonds. (Lately noted to vote.)

Miss., Louisville.—Town, G. W. E. Bennett, Clerk; repair and improve water and sewer systems; voted \$10,000 bonds. (Lately noted to vote.)

Mo., Carthage.—City; defeated \$100,000 water and electric-plant bonds; call another vote. Address The Mayor. (Lately noted to vote Apr. 6.)

N. C., Farmville.—Town, T. E. Joyner, Clk.; construct water-works; \$25,000 bonds.

N. C., Mebane.—Town, W. S. Crawford, Mayor; construct \$125,000 water system; install 500,000-gal. plant; valves, hydrants,

tower and tanks, pumps, pipes, etc.; \$73,984.80; contracts let; other contracts later; Wm. M. Platt, Engr., Durham, N. C. (Lately noted bids until Apr. 6.)

N. C., Mt. Holly.—City; construct \$60,000 water-works; Kluttz & Smith, Engrs., Concord, N. C.

N. C., Winston-Salem. — City, W. H. Holcomb, Clk.; enlarge water-works; issue \$30,000 bonds.

Okla., Altus.—City, Ruth Welch, Clk.; extend water-works; bids until Apr. 19; Johnson & Benham, Conslt. Engrs., Firestone Bldg., Kansas City, Mo. (See Machinery Wanted—Water-works.)

S. C., Anderson. — Equinox Mills; install water supply and sewer systems in mill village for 150 homes; J. E. Sirrine, Archt.-Engr., Greenville, S. C.

S. C., Anderson.—Gluck Mills; plans installation water supply and sewer system in mill village for 150 homes; J. E. Sirrine, Archt.-Engr., Greenville, S. C.

S. C., Newberry.—Commrs. of Public Works; drill 1 or more 300-ft. water wells to accommodate 10-in. piping; bids invited; H. W. Schumpert, Supt. Water-works Dept., Box 333. (See Machinery Wanted—Well Drilling.)

Tex., Dallas.—City, Frank W. Woxenraft, Mayor; improve water-works; voted \$400,000 bonds. (Lately noted to vote.)

Tex., Tulla.—City; plans installation water and power plants. Address The Mayor.

Va., Coeburn.—Town; plans construction water-works. Address The Mayor.

W. Va., Clarksburg.—Water Board, Scotland G. Highland, Secy. and Gen. Mgr.; improve water-works; install 600,000-gal. settling basin; intake chambers; \$37,108.50; Fuller & McClintock, Engrs., 170 Broadway, New York; Richards Construction Co., Contr., Clarksburg. (Lately noted bids until Apr. 3.)

### Woodworking Plants.

Ky., Lexington — Staves.—Lucas E. Moore Stave Co., New Orleans, La.; erect stave plants.

Ky., Louisville — Flooring.—Lanham Hardwood Flooring Co.; increased capital from \$50,000 to \$100,000.

Ky., Louisville.—Wood Products.—Southern Wood Products Co.; increased capital from \$9000 to \$50,000.

Ky., Whitesburg—Staves.—Charles S. Moore Stave Co., Lexington, Ky.; erect stave mills.

La., Lafayette—Sash and Doors.—Lafayette Lumber Co.; establish sash and door factory.

La., Monroe—Motor Wheels.—Weis & Lesh Plant of Motor Wheel Corp., W. C. Brock, Memphis, Tenn.; erect mill-construction plant; install hardwood dimension mill; daily output 25,000 ft. Lately noted. (See Machinery Wanted—Sawmill.)

Md., Baltimore — Builders' Supplies.—Builders' Mill & Hardwood Co., 3252 Frederick Ave., inceptd.; capital \$20,000; Clement S. and Maurice E. Green, Robert G. Hopkins.

Md., Port Deposit—Flooring.—Aulde & Co., Elkton, Md.; establish plant; mfr. parquet flooring.

N. C., Gastonia — Sash, Doors, etc.—City Lumber Co. inceptd.; capital \$150,000; erect plant; mfr. sash, doors, etc.

N. C., High Point — Veneer, etc. — Dixie Veneer & Panel Co. inceptd.; capital \$125,000; H. C., O. E. and G. H. Kearns.

N. C., High Point—Chairs.—Barnes Mfg. Co., E. S. Wall, Mgr.; erect 4-story 80x200-ft. mill-construction building; increased capital to \$125,000.

N. C., Morganton—Veneer.—A. C. Chaffee, O. W. Slane; erect \$25,000 plant; purchased machinery; mfr. rotary veneer.

N. C., Thomasville — Furniture.—Davidson Furniture Co. inceptd.; capital \$50,000; R. T. Lambeth, Thomasville; A. E. Smith, Zenobian Walser; both Lexington, N. C.

Tex., Fort Worth—Sash and Doors.—Toombs-Shepherd Sash & Door Co. inceptd.; capital \$10,000; R. A. and R. L. Toombs, J. M. Thompson.

Tex., Laredo — Crates, etc. — Laredo Crate Factory Co., care of Laredo Chamber of Commerce, organized; erect mill construction building; \$25,000; probably open bids in June; install crate mchy.; \$25,000; open mchy. bids June or July. (See Machinery Wanted—Boilers; Engines; Generators, etc.; Woodworking Machinery.)

Va., Altavista—Wood Novelties.—Altavista Dogwood Products Corp. organized; F. V. Woodward, Prest.; H. L. Lane, V.-P.; P. B. Woodward, Secy.-Treas.; erect 40x200-ft. building; concrete walls and floor; steel roof; \$10,000; construction by owner; install saws, lathes, boring machines; \$15,000; purchased; daily capacity 100,000 dogwood bobbin heads, 2000 shuttles, 10,000 novelty turnings. (Lately noted inceptd., capital \$50,000.)

Va., Galax—Barrel Staves.—Edwards Chair Co.; may install barrel stave mchy. and equipment to mfr. some product from 1 1/2-in. sq. blocks. (See Machinery Wanted—Woodworking Equipment.)

Va., Crozet—Insulator Pins, etc.—Crozet Pin & Bracket Co., W. P. Bickers; establish \$10,000 plant; daily capacity 10,000 locust insulator pins and oak brackets. (See Machinery Wanted—Lumber; Incinerator.)

### Fire Damage.

Ala., Andalusia.—B. H. Engler's store.

Ala., Mobile.—Alfred Beardslee's residence, Dearborn and Lafayette Sts.

Ala., Pargish.—Star Mercantile Co.'s building, owned by T. J. Norris and others; loss \$35,000.

Ark., Arkansas City.—Methodist Church, Frank Ramus' barn and other buildings; loss \$15,000.

Ark., Little Rock.—Missouri Pacific R. R.'s passenger station; loss \$750,000; H. R. Carpenter, Chief Engr., St. Louis.

Ark., Pine Bluff.—F. G. Smart Automobile Co.'s garage, West Baroque St.; loss \$50,000.

Fla., Apopka.—Consumers Lumber & Veneer Co.'s plant; loss \$60,000.

Ga., Abbeville.—D. L. Farrow's residence.

Ga., Atlanta.—Hugh Richardson's building.

Ga., Macon.—H. D. Kaplan Furniture Co.'s building; loss \$10,000.

Ga., Tarver.—T. G. Culbreath's commissary building.

Ky., Elizaville.—Graded School; loss \$20,000. Address School Board.

La., Alexandria.—A. M. Poret's residence and garage.

La., Natchitoches.—J. J. Johnson, Miss Jessie Greene and Chas. Greene's dwellings.

Md., Annapolis.—Harry E. Feldmeyer's residence at Eastport.

Md., Baltimore.—B. Maitland DuBois' residence at Lake Roland; loss \$10,000.

Md., Baltimore.—All Saints' Protestant Episcopal Convent at Orange Grove, nr. Catonsville.

Md., Iron Hill.—Chas. B. Walton's dwelling and outbuildings.

Miss., Clyde.—Lamar Lumber Co.'s commissary; loss \$30,000.

Md., Luke.—W. G. Sigler Planing Mill plant; loss \$50,000.

Miss., Benton.—Donaldson Guion's residence. Miss., Blue Mountain.—Bethel Methodist Church. Address The Pastor.

Miss., Bond.—North Lumber Co.'s sawmill. Miss., Brookhaven.—Lincoln County Lumber Co.'s plant; loss \$85,000.

Miss., Greenville.—George & Nelms Co.'s store; loss \$20,000.

Miss., Roundaway.—Roundaway Mfg. Co.'s ginney.

N. C., Greensboro.—S. F. White's residence, near Guilford battleground; loss \$10,000.

N. C., King.—E. B. Isley's residence; occupied by Mrs. B. L. Grabs.

N. C., Rocky Mount.—Franklin County courthouse. Address County Commrs.

N. C., Selma.—Public School; loss \$50,000; W. B. Crumpton, Supt. of Schools.

N. C., Winston-Salem.—L. C. Merritt's residence on Winston-Salem-Germantown Rd.

Okla., Elk City.—Dixie Store; I. H. G. Hulme's store; loss \$200,000.

Okla., Enid.—J. T. Shaw's grain elevator; loss \$215,000.

Okla., Enid.—Chicago, Rock Island & Pacific R. R.'s freight depot; C. A. Morse, Chief Engr., Chicago; J. T. Shaw's elevator; loss \$215,000.

S. C., Timmons ville.—Dr. T. H. Houck's business block; loss \$50,000.

S. C., Troy.—Troy Oil Mill's ginney.

Okla., Tulsa.—G. M. Britain's residence.

Tenn., Memphis.—Phoenix Cotton Oil Co.'s hullhouse.

Tex., Abilene.—State Epileptic Colony's laundry plant; loss \$50,000.

Tex., Brownwood.—Jefferson Hotel; under construction; loss \$20,000. Address The Proprietor.

Tex., Ferris.—Tabernacle Baptist Church building. Address The Pastor.

Tex., Fort Worth.—Mrs. G. V. Brown's store; loss \$15,000.

Tex., Gilmer.—Mrs. Simpson and J. Waghalter's dwellings; loss \$25,000.

Tex., Marlin.—T. F. Glass' cotton gin; loss \$15,000.

Va., Gordonsville.—H. Bear's store and 3 warehouses; T. W. Ross, Geo. P. Wilkins, A. J. Barrett, Gordonsville Hardware Co. and A. J. Phillips' stores; Henry Noble's residence; Chesapeake & Ohio R. R.'s signal tower; loss \$100,000.

W. Va., Blair.—M. B. Mullin's 2 business buildings and dwelling.

W. Va., Mt. Hope.—Geo. Waldo's residence and electrical shop; W. H. Lindamood's undertaking establishment; W. R. Gary's residence; Henry Bailey's dwelling; loss \$50,000.

fixtures; bids ready in few days; Sam Stone, Jr., Archt., 714 Union St., New Orleans. (Lately noted under New Orleans.)

Md., Baltimore.—Chas. S. Bailey, 3003 St. Paul St., and others; erect \$4,500,000 bank and office building, Calvert and Lexington Sts.; E. H. Glidden, Archt., 1210 American Bldg.; details not determined.

Md., Baltimore.—Standard Oil Co., Pier 2, Pratt and Commerce Sts.; erect \$700,000 office building, Courtland and Franklin Sts.; 6 stories; 140x90 ft.; brick and marble; fireproof; slag roof; 2 passenger and 1 freight elevator; Clyde N. Friz, Archt., 814 Lexington Bldg.; bids opened Apr. 22; contractors estimating; Chas. L. Stockhausen Co., Natl. Marine Bank Bldg.; Consolidated Engineering Co., Calvert Bldg.; Hicks, Tase & Norris, 106 W. Madison St.; Morrow Bros., Fidelity Bldg.; J. Henry Miller, Inc., Franklin and Eutaw Sts.; Frairie Bros. & Haigley, 18 Clay St.; Cogswell, Koether Co., 406 Park Ave.; Price Construction Co., Maryland Trust Bldg.; H. D. Watts Co., Garrett Bldg.; Jno. Hiltz & Sons, 2 E. Redwood St.; West Construction Co., 907 American Bldg.; Milton C. Davis, 902 W. 30th St.; Geo. A. Fuller Co., American Bldg.; all Baltimore; Tucker & Lewis, New York. (Previously noted.)

Md., Cumberland.—West Side Realty Co.; erect office building; 116x109 ft.; reinforced concrete and steel; composition and tile roof; reinforced concrete floor; electric lights; steam heat; bids about May 10. Address Geo. F. Sansbury, Archt. (See Machinery Wanted—Building Material; Sash; Roofing; Terra-Cotta Trim, etc.)

Mo., Kansas City.—R. A. Long Bldg., Hughes Bryant, Agt.; expend \$90,000 to install electric elevators.

Mo., Kansas City.—Citizens' Security Bank; erect \$25,000 building, Englewood; 80x81 ft.; frame and brick; tile and asphalt roof; steam heat; Brostrom & Drotts, Archts., 401 Reliance Bldg. (Lately noted.)

N. C., Oxford.—Sam Watkins; erect 50-ft. addition to building for Southern Express Co.; also plans to erect building for Western Union Telegraph.

Okla., Oklahoma City.—Liberty National Bank; remodel building; 5 stories and basement; 50x140 ft.; tar and gravel roof; tile or terrazzo floors; safes; interior tile; metal doors; vaults; wire glass; 1 passenger elevator; steam heat; \$125,000; Monnot & Reid, Archts., 409 Empire Bldg. (Lately noted.)

Mo., St. Joseph.—Fidelity Trust Co.; remodel building, 9th and Francis Sts.

Okla., Tulsa.—Chestnut & Smith; erect \$100,000 office building; 3 stories and basement; brick and stone; 42½x106 ft.; fireproof; shower baths; steam heat; marble wainscoting.

Okla., Tulsa.—Lon R. Stansbury; erect 3-story office building; \$90,000.

Okla., Tulsa.—Chestnut & Smith Co.; erect 3-story office building; \$100,000.

Tex., Houston.—Central and Magnolia Park State Bank, Wm. F. Humphrey, Prest.; plans to erect brick building.

Tex., Orange.—Orange National Bank; expend \$200,000 to remodel 2-story building and erect 6-story addition for bank and offices; reinforced concrete and steel; elevator.

Tex., Vernon.—Waggoner Natl. Bank; erect addition; install safes, vaults and additional safety deposit boxes.

Va., Norfolk.—Citizens' Bank; erect 1-story and partial ninth story addition; install electric elevators; kitchen, mezzanine, penthouse, etc., on ninth floor; \$100,000. (Lately noted to erect 1-story addition.)

Va., Lawrenceville.—First National Bank; erect store and office building; 36x100 ft.; brick; slag roof; rift pine, tile and marble

## BUILDING NEWS

EXPLANATORY.

Buildings costing less than \$10,000 not covered in these reports.

### BUILDINGS PROPOSED

#### Apartment-Houses.

Fla., Palm Beach.—H. G. Curtis, Propr. Terminal Hotel, Chattanooga, Tenn.; reported to erect 50-room apartment building.

Ga., Atlanta.—H. B. Schumpert; erect \$50,000 apartment building; 2 stories; stone, veneer and stucco.

Ga., Savannah.—I. L. Echols and associates; erect \$75,000 apartment building for J. J. Raders; 3 stories; brick; 15 suites; 5 rooms; steam heat.

Ky., Versailles.—B. W. Brittingham and A. D. Hughes; remodel residence for apartments; storeroom first floor.

Md., Baltimore.—Geo. A. Blake, Hoffman Bldg.; alter residence for apartments; metal doors; plaster-board; remodel steam-heating system; electric lights; Robt. L. Harris, Archt., 703 Calvert Bldg. Address owner, who is taking subids.

Mo., Kansas City.—Willard B. Weaver and associates; erect \$120,000 apartment-house; 4 stories; fireproof; reinforced concrete; Thos. D. Bread, Archt.

N. C., Greensboro.—Southern Developing & Operating Co. (W. R. Becker and others); erect \$250,000 apartment-house.

S. C., Anderson.—Anderson Apartment House Co.; erect \$75,000 apartment building; 3 stories; 12 suites; hot-water heat.

S. C., Gaffney.—Dr. J. G. Pittman and others; interested in erecting \$60,000 apartment building.

#### Association and Fraternal.

Ga., Macon.—Ancient Free and Accepted Masons; expend \$10,000 to remodel residence for clubhouse, ballroom, banquet hall, cafe, etc. J. Walter Collins, Chrmn. Comm.

Ky., Hazard.—National Defenders; erect

\$50,000 building; 3 stories; 1st floor, stores; 2d, reception room, club, etc.; 3d, lodgeroom.

La., New Orleans.—Young Men's Christian Assn.; considering erecting building, Lee Circle and St. Charles St.

N. C., Charlotte.—Salvation Army, Geo. Morris, Commandant; plans erection building.

#### Bank and Office.

Ala., Russellville.—Tennessee Valley Bank; erect building; brick and stone; 24x84 ft.; electric lights; plate-glass doors; tile floors; stone columns, etc.

Fla., Homestead.—Citizens' Bank, A. C. Graw, Prest.; plans to erect building; 1 story; 58x75 ft.; concrete; probably tile roof; wood and tile floor; city lighting. (See Machinery Wanted.—Bank Fixtures; Vault.)

Fla., Miami.—First Trust & Savings Bank; erect building; 32x72 ft.

Fla., Miami.—T. O. Wilson and associates; erect 3-story reinforced concrete or cement block building; pending erection of 15-story structure.

Ga., Atlanta.—E. W. and Winter Alfriend; remodel hotel for offices; Thornton Marye, probable Archt.

Ga., Coeburn.—First National Bank, W. S. Dodd, V.-P.; erect addition; 2 stories; 25x125 ft.; brick; metal or composition roof; wood floors; hot-water heat; electric lights; C. B. Kearfott, Archt., Bristol, Tenn. Address owner. (See Machinery Wanted.—Brick.)

La., Gretna.—Gretna Exchange & Savings Bank, Jules G. Fisher, Prest.; erect \$34,000 building; 35x67 ft.; brick; Indiana limestone; marble, wood and concrete floors; burglar-proof vault; safes; interior tile; vault lights; steel and sash trim; marble and mahogany

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

floors; steam heat; electric lights; receiving bldg. Address H. T. Barnham, Archt., Chamber of Commerce Bldg., Richmond. (Lately noted.)

W. Va., Huntington.—Ben Gwin; erect \$26,000 office building.

W. Va., Morgantown.—Monongahela Building Co.; plans to erect building for Bank of Monongahela Valley.

### Churches.

Ga., East Point.—East Point Methodist Church considering erecting \$35,000 to \$30,000 building. Address The Pastor.

Ga., Savannah.—Church of Blessed Sacrament; erect \$30,000 building. Address The Pastor.

Ky., Buena Vista.—Baptist Church, Rev. W. Jester, Pastor; erect building.

La., New Orleans.—St. Charles Avenue Christian Church; erect building; Jones & Roessle, Archts., Maison Blanche Bldg.

Miss., Marion.—Marion Methodist Church; considering erecting building. Address The Pastor. (Previously noted damaged by fire.)

Miss., McComb City.—Presbyterian Church; erect \$50,000 building. Address The Pastor.

N. C., Oxford.—Methodist Church; plans to erect parsonage. Address The Pastor.

N. C., Snow Hill.—Methodist Church; erect \$50,000 building; brick and stone. Address The Pastor.

Okla., Oklahoma City.—Bunn Booth; permit to erect \$25,000 tabernacle.

Okla., Tulsa.—Second Presbyterian Church, Rev. W. H. Murphy, Pastor; erect \$10,000 building.

S. C., Landrum.—Methodist Church; erect building. Address The Pastor.

Tex., Houston.—South End Christian Church, Rev. A. E. Ewell, pastor; erect \$500,000 building.

Tex., Olney.—Methodist Church; bids until Apr. 17 to erect building; plans and specifications at office Meadow & Wolf, Archts., Fort Worth, or with A. D. McMillan, Olney.

Tex., San Antonio.—Grace Lutheran Church, Rev. Paul F. Hein, Pastor; erect \$30,000 concrete parish-house.

Tex., San Antonio.—Utica Presbyterian Church; erect \$35,000 building; 1 story and basement; concrete, hollow tile and stucco; Ralph Cameron, Archt., 606 Frost Bldg.

Va., Richmond.—First Baptist Church, Rev. Dr. McDaniel, Pastor; considering erecting \$350,000 building; gift of W. S. Forbes.

Va., Richmond.—Highland Park Methodist Church, Rev. L. T. Williams; erect \$80,000 building.

Va., Richmond.—Highland Park Methodist Church, Rev. L. T. Williams, Pastor; erect \$80,000 building.

W. Va., Huntington.—Highlawn Presbyterian Church, Rev. W. P. Hooper, pastor; erect \$45,000 building; 60x90 ft.; brick or stone; steam heat; electric lights; bids about May 15. Address Sidney Day, Archt. (See Machinery Wanted—Building Material.)

### City and County.

La., New Orleans.—Sheds.—Board of Commissioners, Suite 200, New Court Bldg.; bids until Apr. 27 for structural steel for 2 sheds at Desire St., Banana Wharf; fabricated f. o. b. contractors' plant; plans and specifications at office Arsene Perillat, Ch. Engr., No. 1 Canal St.

Md., Baltimore.—Morgue.—City, Chas. H. Osborne, Building Inspector, City Hall; erect morgue on Pratt St. between Pier 6 and East Falls Ave.; accommodate 60 bodies; rein-

forced concrete; contain chapel, waiting rooms, refrigerating equipment, etc.

Miss., Meridian.—Auditorium.—City; erect auditorium, seat 3000 to 5000; plans to issue bonds. Address The Mayor.

Okla., Okmulgee.—Library.—City; reported to vote on \$50,000 library bonds. Address The Mayor.

S. C., Greenville.—Library.—City; erect \$25,000 Carnegie library; J. W. Norwood and others, Comm.

Tex., Dallas.—Fire Station.—City; erect fire station; bungalow type.

Tex., Dallas.—Detention Home.—Dallas County, Chas. E. Gross, Auditor; erect servant's house and garage at County Detention Home, Oak Cliff; bids opened Apr. 15.

Tex., Haskell.—Jail.—Haskell County Commissioners; bids until May 6 for removing and remodeling jail cells and corridors, etc.; Jas. P. Kinnard, County Judge.

Tex., San Angelo.—Coliseum.—City, Board of Development, John Y. Rust, Prest.; erect \$150,000 coliseum.

### Courthouses.

La., Alexandria.—City, R. W. Bringham, Commr.; bids until May 3 for material and erection of courthouse and jail; 2 stories; reinforced concrete; Duncan & Barron, Archts. (Previously noted.)

N. C., Rocky Mount.—Franklin County Commrs.; repair courthouse, noted damaged by fire.

Okla., Frederick.—Tillman County Commrs.; voted \$125,000 bonds to erect courthouse. (Previously noted.)

### Dwellings.

Ark., Marianna.—Mrs. P. R. Turner; erect \$14,000 residence; tile; Mann & Gatling, Archts., 614-616 Scimitar Bldg., Memphis, Tenn.

Ala., Birmingham.—Birmingham Realty Co.; erect 2 dwellings; frame; \$11,000.

D. C., Washington.—J. H. Davis, care Delos H. Smith, Archt., Union Trust Bldg.; erect \$14,000 residence; 48.9x31 ft.; stucco on hollow tile; slate roof; oak and pine floors; hot-water heat. Address W. E. Mooney, 505 Evans Bldg. (Lately noted.)

Fla., Miami.—Med R. Kellum, F. T. Myers, reported to erect residence.

Fla., Miami.—Allison Real Estate Co., J. A. Allison, Prest.; erect dwellings.

Fla., St. Petersburg.—C. Perry Snell; erect \$15,000 residence; 35x45 ft.; brick, concrete block and stucco; slate roof; wood floors; interior tile; W. S. Shull, Archt. (Lately noted.)

Ga., Atlanta.—Nellie Waters; erect residence.

Ga., Atlanta.—J. M. Phagan; erect residence; 2½ stories; brick.

Ga., Cedartown.—Cedartown Cotton & Export Co.; erect number dwellings.

Md., Baltimore.—Acme Building Co., Equitable Bldg.; erect 7 dwellings, Morris Ave.; 7, Penna. Ave., and 11 Hilton St. and Marley Ave.; 3 stories; brick; \$63,000.

Md., Baltimore.—Frank O. Singer, Jr., Harford Ave. and 25th St.; erect 12 dwellings, 200 block 29th St.; 2 stories; brick; \$25,000.

Md., Baltimore.—E. J. Gallagher Realty Co., Munsey Bldg.; erect 15 dwellings 3300 block Westerwald Ave.

Md., Baltimore.—Bethlehem Shipbuilding Corp.; erect 100 dwellings; 2 stories; tile; Edward L. Palmer, Jr., Archt., 513 N. Charles St.; bids being considered by owner. (Lately noted.)

Md., Baltimore.—Wm. A. Hummel, 37 Augusta Ave., Irvington; erect 5 dwellings, Augusta Ave., nr. Massachusetts Ave.; 2 stories; brick; \$15,000.

Md., Baltimore.—J. J. Bandel, 25 S. Calvert St.; erect \$15,000 residence, Guilford; 30x32 ft.; brick; slate roof; hardwood floors; steam heat; electric and gas lights; Hallett & Pratt, Archts., American Bldg.; construction by owner.

Md., Baltimore.—Rosehill Realty Co.; erect 27 dwellings, Hampton Ave. and Old Pimlico Rd.; 2 stories; \$50,000; Stanislaus Russell, Archt., 11 E. Lexington St.

Md., Glen Dale.—Irvin & Shanks, Washington, D. C.; plans to erect 200 dwellings; 5, 6 and 8 rooms.

Md., Iron Hill.—Chas. B. Walton; rebuild residence and outbuildings noted damaged by fire.

Md., Sparrows Point.—Bethlehem Ship Building Corp.; erect 100 dwellings; 2 stories; tile; contractors estimating; Hicks, Tase & Norris, 106 W. Madison St.; Walter G. Tovell, Eutaw and McCulloh Sts.; Consolidated Engineering Co., Calvert Bldg.; Commonwealth Building Co., Commonwealth Bank Bldg.; E. C. Turner; Gladfelter & Chambers, 36th St. and Roland Ave.; J. W. Ferguson, 4116 Falls Rd., all of Baltimore; Irwin & Leighton, Sparrows Pt. (Lately noted.)

Miss., Clarksdale.—A. J. Simmons; erect \$56,000 residence; brick veneer; tile roof; 2 stories; plans ready Apr. 26; Mann & Gatling, Archts., 614-616 Scimitar Bldg., Memphis, Tenn.

Mo., Kansas City.—Geo. T. O'Maley of O'Maley Ford Sales Co.; erect \$40,000 Mount Vernon colonial type residence.

Mo., Springfield.—J. E. Lukins, Kansas City; erect \$12,000 residence; Hawkins & Hoerner, Archts., Springfield.

N. C., Marion.—Hugh F. Little, Asst. Treas. Marion Manufacturing Co.; erect bungalow; brick and hollow tile. (See Machinery Wanted—Building Material; Heating Plant; Electric Equipment, etc.)

Okla., Oklahoma City.—Aurelius Swanson Co., State Natl. Bank Bldg.; erect 7 dwellings; \$63,000.

Okla., Oklahoma City.—G. A. Nichols, Inc., Southwest Natl. Bank Bldg.; erect \$15,000 residence; 30x40 ft.; stucco on metal lath; tar and gravel roof; hardwood floors; hot-air heat \$350; interior tile; concrete basement floor; also 12 bungalows; \$5000 each; 28x40 and 30x36 ft.; frame; shingle roof; hardwood floors; plans and construction by owner. (Lately noted.)

S. C., Greenville.—W. E. McCain; erect 2 dwellings; \$14,000.

Tenn., Memphis.—H. S. Fulcher; erect \$12,000 residence; 2 stories; brick veneer; 8 rooms.

Tex., Dallas.—Alexander A. Slaughter; erect \$12,000 brick-veneer residence.

Tex., Dallas.—W. D. Slaton; erect hollow-tile residence; also brick-veneer residence; \$12,000 each.

Tex., Dallas.—Kidd-Scruggs Co.; erect 2 brick cottages; \$10,000 and \$9000, respectively; also \$6000 frame cottage.

Tex., Dallas.—S. Kirkgard; erect \$25,000 brick-veneer residence.

Tex., Dallas.—S. Teatsworth; erect \$18,000 brick-veneer residence.

Tex., Dallas.—Walter C. Cameron; erect \$18,000 brick-veneer residence.

Tex., Dallas.—T. P. Finnegan; erect \$10,000 brick-veneer residence.

Tex., Dallas.—F. J. Vandenback; erect \$10,000 2-story frame residence.

Tex., Dallas.—Geo. S. Otey; erect \$13,000 brick-veneer cottage.



Tex., Dallas.—J. L. McNess; erect \$13,000 brick-veneer residence.

Tex., Dallas.—J. W. Halsell; erect 3 brick-veneer residences; 2 stories; \$12,000, \$16,000 and \$20,000.

Tex., Dallas.—Home Building Co.; erect 2 brick-veneer residences; \$17,000 each.

Tex., Dallas.—Highland Building Co.; erect \$12,000 brick-veneer cottage.

Tex., Dallas.—W. W. Graham; erect 2 brick-veneer cottages; \$11,000 and \$6500, respectively.

Tex., Dallas.—Filippen-Prather Co.; erect \$18,000 cottage; brick, tile and stucco.

Tex., Dallas.—R. A. Turnbull; erect 2-story frame cottage; \$10,000.

Tex., Del Rio.—Moore Estate; erect residence; Atlee B. Ayres, Archt., San Antonio, receiving bids.

Tex., El Paso.—Duckett & Hutchins; erect 6 bungalows; \$20,000.

Tex., El Paso.—F. L. O'Brien; erect \$12,000 and \$5000 six-room dwellings.

Tex., El Paso.—Terrace Improvement Co.; expend \$400,000 to erect 5 and 6-room dwellings.

Tex., Fort Worth.—Henigar Bros.; erect \$12,000 brick residence.

Tex., Fort Worth.—Carb Building Co.; erect 2 dwellings; 7 rooms each; \$27,500.

Tex., Houston.—B. Block; erect addition and remodel dwellings; 2 stories; stucco; \$18,800.

Tex., Houston.—J. A. Reynolds; erect \$14,000 residence; 2 stories; brick veneer.

Va., Coeburn.—Lay Bros.; erect residence.

Va., Portsmouth.—E. E. Wells; erect \$10,000 residence in Chesterfield Heights.

W. Va., Hinton.—J. R. Cary, Gen. Supt. Chesapeake & Ohio Railroad; rebuild residence near Ivy.

W. Va., Huntington.—General Building & Realty Co., Inc., W. P. Lear, Prest.; erect number dwellings.

### Government and State.

Fla., Gainesville.—Home.—Florida State Farm Colony for Epileptic and Feeble-minded, Dr. Lorin A. Green, Supt., Aragon Hotel, Jacksonville; bids until May 6 to erect administration building; separate bids for heating and plumbing; plans and specifications at office T. M. Bryan, Archt., Gainesville. (Previously noted.)

Va., Richmond.—Library.—Virginia State Library Board, Edmund Pendleton, Chmn.; erect \$40,000 fireproof annex to library.

### Hospitals, Sanitariums, Etc.

Tex., Amarillo.—Potter County Comms.; erect hospital; \$250,000 bonds voted.

Tex., San Antonio.—Home.—State Home for dependent and Neglected Children, Annie Webb Blanton, Secy.; erect administration building and 2 cottages; \$90,000; competitive plans and specifications until May 10.

### Hotels.

Ala., Livingston.—T. M. Tartt and others; erect 50-room hotel; brick; flat roof; tile and wood floors; steam heat; elevator; electric lights; cold storage, etc.; plans ready in 30 days; P. J. Krouse, Archt., Meridian, Miss.

Fla., Boynton.—Boynton Beach Hotel Assn., Incptd.; \$200,000 capital; expend \$75,000 to enlarge Boynton Hotel, erect cottages in connection, etc.

Ala., Dothan.—J. L. Smith and associates, Akron, O.; reported promoting erection hotel.

Fla., St. Augustine.—Fountain of Youth Hotel Co., F. L. Hall, financial representative; expend \$10,000,000 to erect hotel, bungalow colony, apartments, etc.; hotel to con-

tain auditorium with pipe organ; roof garden; ice-skating rink; bungalows to be erected on filled-in land; construct bridge—Starrett & Van Vleck, 8 W. 40th St., and King & Campbell, Archts.; Vitale, Brivekerhoff & Geiffert, Landscape Archts.; all New York; Gould T. Butler, Consult. Engr., St. Augustine; E. L. Barnett, Inc., W. J. Hoggson, Prest., 18 E. 41st St., New York, interested. Mr. Hoggson wires Manufacturers Record: "Hotel project not yet completed." (Previously noted.)

Fla., St. Andrews.—J. L. Smith and associates, Akron, O.; promoting erection hotel.

La., Lafayette.—Gordon Hotel; remodel and erect addition.

La., Lafayette.—Gordon Hotel; erect three-story annex; 26 to 30 rooms; Favrot & Livaudais, Archts., Perrin Bldg., New Orleans. (Lately noted.)

Mo., Hannibal.—Mark Twain Hotel; erect \$50,000 addition; 4 stories; 36x50 ft.; brick and concrete; fireproof; Barnett, Haynes & Barnett, Archts., Syndicate Trust Bldg., St. Louis.

S. C. Charleston.—Francis Marion Hotel Co.; erect 10 or 11-story hotel; 105x160 ft.; 300 rooms with bath or shower; reinforced concrete; \$1,000,000; W. L. Stoddart, Archt., 9 E. 40th St., New York. (Lately noted.)

S. C. Florence.—J. M. Lynch, Chmn. Committee; promoting erection \$500,000 hotel.

Tenn., Memphis.—Memphis Hotel Co., A. L. Parker, Gen. Mgr.; erect Peabody Hotel to replace present structure; 750 rooms; reported cost \$3,000,000.

Tex., Dallas.—Oriental Hotel, Otto Harold, Mgr.; expend \$60,000 to \$70,000 for improvements; install 2 electric elevators, refurnish, etc.

### Miscellaneous.

Ala., Montgomery.—Undertaking Establishment.—Leak-McCarthy Co.; remodel and enlarge residence for undertaking establishment.

D. C. Washington.—Clubhouse.—Metropolitan Club, 17th and H Sts. N. W.; erect addition to clubhouse.

Ga., Atlanta.—Clubhouse.—Colonial Club; erect building to replace burned structure; 80x140 ft.; 2 stories; veranda width of building; 375 lockers.

Ga., Sulphur Springs.—Bathhouses.—Josiah Richardson; improve summer resort; construct bathhouses; 100 rooms; rebuild boat-houses, etc.

Md., Baltimore.—Community Buildings.—J. W. McClellan, 3217 Greenmount Ave.; erect two 2-story community buildings, Pressman St., near Poplar Grove St.; \$17,000.

Tex., Dallas.—Clubhouse.—Dallas Athletic Club, T. L. Monagan, Secy.; erect \$1,250,000 clubhouse; 200x142 and 154x121 ft.; reinforced concrete; tar and gravel roof; hardwood, tile and cement floors; vacuum steam heat; city lighting; electric elevators; Lang & Witchell, Archts. Address owner. (Previously noted.)

### Railway Stations, Sheds, Etc.

Ark., Little Rock.—Missouri Pacific R. R., H. R. Carpenter, Chief Engr., St. Louis; rebuild passenger station noted burned at loss of \$750,000.

Ga., Macon.—Central of Georgia R. R., C. K. Lawrence, Ch. Engr., Savannah; erect freight terminal; construct concrete driveway; incoming and outgoing sheds, etc.; Geo. B. Swift Co., Contrs., 189 W. Madison St., Chicago.

Okla., Enid.—Chicago, Rock Island & Pacific R. R., C. A. Morse, Ch. Engr., Chicago; rebuild freight depot noted burned.

Tex., Cisco.—Texas & Pacific R. R., E. F. Mitchell, Ch. Engr., Dallas; expend \$15,000 to repair depot.

Tex., Fort Worth.—St. Louis Southwestern R. R., A. A. Matthews, Ch. Engr., Tyler, Tex.; erect freight terminal at Hodge Station.

Tex., San Antonio.—San Antonio Traction Co.; erect 3-story and basement fireproof building; Atlee B. Ayres, Archt.

### Schools.

Ark., Little Rock.—Arkansas School for Blind, Geo. Thornburgh, Supt.; repair structure lately noted burned; pine floors; slate roof.

D. C., Washington.—Board of Comms., Room 509, District Bldg.; alter and erect addition to Petworth School, No. 131, 8th and Shepherd Sts. N. W.; bids opened Apr. 15; plans and specifications at office Chief Clk., Engineer Dept., Room 427, District Bldg.

Fla., Homestead.—County Board of Public Instruction, R. E. Hall, Supt.; vote May 8 on \$25,000 bonds; erect addition to school.

Fla., Miami.—County Board of Public Instruction, R. E. Hall, Supt.; vote May 8 on \$400,000 bonds; additions to schools at Buena Vista, Highland Park, Southside, Riverside, Allapattah, Orange Glade, high school, new structures at Johnson St. and in colored settlement.

Ga., Milledgeville.—Georgia Military College; erect building.

Ky., Elizaville.—School Board; erect building to replace structure noted burned at loss of \$20,000.

Miss., Grenada.—School Board; erect high school and repair structures; vote on \$125,000 bonds.

Miss., Lake.—School Board; erect brick and frame school; cement and wood floors; steam heat; electric lights; bids until Apr. 24; P. J. Krouse, Archt., Meridian. Address A. Wilkins, Chmn. School Board, Lake. (Lately noted.)

Miss., Lumberton.—School Board, J. E. McNair, Chmn.; erect \$30,000 annex to high school; metal shingle roof; steam heat; plumbing; bids until Apr. 26; P. J. Krouse, Archt., Meridian, Miss.

Mo., Poplar Bluff.—Board of Education; repair and erect additions to schools; \$30,000 bonds voted.

Mo., Springfield.—City, W. W. Thomas, Supt. of Schools; voted \$600,000 to erect 3 junior high schools, repair and improve present structures. (Lately noted.)

Mo., St. Louis.—Board of Education, Frank Carter, Chmn. Building Comm.; opened bids to erect William Stix School; lowest bids as follows: Harvey-Burden Contracting Co., \$312,800 for building; North St. Louis Planning Mill Co., mill work, \$27,038; Wm. Hunt, plumbing, \$21,721; D. F. Edwards Heating Co., heating and ventilating, \$62,880; Guarantee Electrical Co., electric wiring, \$13,360.

N. C., Charlotte.—Mecklenburg County School Board, J. M. Matthews, Supt.; erect school for Hopewell, Trinity, Abernethy and Beach Cliff consolidated districts; vote on \$30,000 bonds.

N. C., Clemson College.—Clemson College; erect addition to building; Prof. R. L. Lee, Archt. for college.

N. C., Derita.—School Board, J. M. Matthews, Supt., Charlotte; erect school; brick; vote May 15 on \$30,000 bonds.

N. C., Hamlet.—Board of Education, C. S. Warren, Supt.; erect \$75,000 high school; 12x70 ft.; hollow fireproof tile; brick; tile or slate roof; probably concrete floors; steam heat; ventilators; also repair present struc-

ture; install heating plant; enlarge and repair colored school; \$100,000 bonds voted; Chas. C. Hook, Archt., Charlotte. Address W. R. Land, Prest. School Board. Lately noted. (See Machinery Wanted—Tile; Rolling Partitions; Ventilators.)

N. C., Hendersonville.—Board of Education; erect building in Ebenezer Dist.; \$10,000 bonds voted.

N. C., Hillsboro.—Orange County Board of Education, R. H. Clayton, Supt.; erect school; \$25,000 bonds authorized.

N. C., Saluda.—School Board, W. C. Robertson, Secy.; erect \$20,000 school; contract let May 1.

N. C., Selma.—School Board, W. B. Crumpton, Supt.; rebuild school noted burned at loss of \$50,000.

N. C., Winston-Salem.—Board of Education; remodel and enlarge North grade school; erect 37x126-ft. addition; reinforced concrete, steel and brick veneer; heating plant; 6 classrooms; remodel basement and enlarge auditorium of present structure; rebuild heating plant; provide swimming pool, 17x50 ft.; 8 to 10 shower baths, etc.; plans by C. R. Faw of high-school faculty. (Previously noted.)

Okla., Ninnekah.—Board of Education, Dist. No. 51, E. Anderson, Clerk; erect brick and frame addition to public school; \$50,000; bids opened Apr. 16; plans and specifications at office E. H. Eads, Archt., Sayer Bldg., Chickasha, Okla., and office Mr. Anderson. (Previously noted to open bids Mch. 4.)

Okla., Vanoss.—Vanoss, Lanhard and Bellevue School Dists. will consolidate and erect school. Address Dist. School Trustees.

S. C., Anderson.—Anderson College; erect \$40,000 dormitory; 3 stories; 40x100 ft.; Casey & Fant, Archts.

S. C., Clio.—Clio School Dist. Trustees; erect, repair and remodel schools; election Apr. 19 on \$50,000 bonds.

S. C., Florence.—Board of Commrs., N. W. Hicks, Chrmn.; erect schools; election Apr. 21 on \$85,000 bonds.

S. C., Greenville.—City, Geo. W. Sirrine, Secy. Board of School Trustees; votes April 28 on \$250,000 school bonds. (Lately noted.)

S. C., Rock Hill.—York County School Board, R. C. Burts, Secy.; erect colored school and grammar school for whites; \$75,000 bonds voted. (Lately noted.)

Tenn., Jonesboro.—Washington County School Board, J. C. Berry, Supt.; bids until Apr. 30 to erect school in Dist. No. 8.

Tex., Clint.—El Paso County Board of Education, Myra Winkler, Supt., El Paso; erect \$12,000 school.

Tex., Dallas.—City voted \$1,500,000 school bonds. Address The Mayor. (Lately noted.)

Tex., Hico.—Board of Education; erect building; \$50,000 bonds voted.

Tex., Lockhart.—Lockhart Independent School Dist.; erect several schools; brick; Page & Page, Archts., Austin, Tex., supervise construction; \$200,000 bonds voted. (Lately noted.)

Tex., El Paso.—Loretto Literary and Benevolent Institution, Mother Praxedes, Prest.; erect \$200,000 fireproof building; ultimate expenditure more than \$400,000; preliminary work to include grading, etc.; details not determined. (Lately noted.)

Tex., Robert Lee.—School Board, Smith Bird, Chrmn. Bldg. Committee; erect school.

Va., Portsmouth.—Norfolk County Board of Education; erect 4-room schools in Butt's Road and Pleasant Grove Dists.

W. Va., Clarksburg.—Board of Education, Jas. N. Hess, Secy., Empire Bank Bldg.; bids until April 30 to erect Junior High School; separate bids for heating and ventilating,

plumbing, sewerage and gasfitting, electric work; 206x72 ft.; reinforced concrete corridors, floors and stairs, remainder mill construction; hollow fireproof tile; ornamental terra-cotta; built-up roof; cement, cork and hardwood floors; plaster-board; metal doors; wire glass; vault lights; steel sash and trim; plans and specifications at offices Board of Education and Holmboe & Lafferty, Archts. (Lately noted.)

W. Va., Chapmansville.—Board of Education, G. W. Hensley, Prest.; erect elementary school; vote April 24 on \$45,000 bonds.

W. Va., Chapmanville.—Board of Education; erect \$25,000 school; 4 rooms; election Apr. 24. Address J. W. Barker, Secy. School Board. (Lately noted.)

W. Va., Huntington.—Board of Education; erect junior high school; bids until May 17; plans and specifications after April 24 at office Meanor & Handloser, Archts., Robson-Prichard Bldg. (Lately noted.)

W. Va., Huntington.—Board of Education, Clarence L. Wright, Supt.; erect 12-room addition to Simms School; \$100,000; bids until April 28; Richard M. Bates, Archt.; also 8-room addition to Miller School; 100x100 ft.; slow-burning construction; hollow fireproof tile; hardwood and concrete floors; tile roof; metal doors; rolling partitions; wire glass; hot-air heat; city lights; Wm. Francis Diehl, Archt., Robson Prichard Bldg. (Lately noted.)

W. Va., New Martinsville.—Magnolia Dist. School Trustees; erect high school in New Martinsville; also grade school in Paden City; plan to issue \$139,000 bonds.

W. Va., Ravenswood.—School Dist. Trustees; erect high school; \$62,000 bonds voted. (Lately noted.)

W. Va., Paden City.—Magnolia Dist. School Trustees; erect grade school. (See W. Va., New Martinsville.)

## Stores.

D. C., Washington.—Herman Robin; erect business building on Georgia Ave.

D. C., Washington.—Samuel A. Drury; erect building at Georgia Ave. and Otis St.

D. C., Washington.—Chas. G. Pluto and Michael S. Weckler; remodel 3 brick dwellings, 6th and O Sts. N. W., for business building.

D. C., Washington.—C. W. King, Jr., 920 New York Ave. N. W.; erect store and dwelling; 22x52 ft.; brick; slag roof; hardwood and concrete floors; interior tile; wire glass; metal ceilings; plaster board; hot-water heat; electric lights; N. R. Grimm, Archt., 1517 H St. Address owner. (Lately noted.)

Fla., Jacksonville.—C. Wilson; erect \$25,000 addition to store.

Fla., Miami.—Mrs. R. S. Anthony; erect building; 12 stores.

Fla., Orlando.—R. Beacham, Jr.; erect several store and office buildings. (See Theaters.)

Ga., Atlanta.—Forrest Greene; erect 2-story brick business building; \$30,000.

Ga., Atlanta.—J. R. Smith; erect \$40,000 building; 2 stories; reinforced concrete.

Ga., Lagrange.—Daniel Grocery Co.; erect building.

Ga., Lagrange.—Daniel Grocery Co.; erect \$15,000 building; 47x130 ft.; 1 story; brick; hollow fireproof tile; wood floors; wire glass; steel sash and trim; bids opened about July 1. (Lately noted.)

Ga., Macon.—B. T. Adams; erect brick building for stores and automobile salesrooms.

Miss., Clarksdale.—L. Jacobson; erect 2-story brick store and office building.

Mo., St. Louis.—Morris Fixman; erect

\$20,000 addition to store; 1 story; 25x80 ft.; brick; semi-fireproof; Wedemeyer & Nelson, Archts., Wainwright Bldg.

N. C., Asheville.—Harkins Estate; expend \$41,000 to repair Kress Bldg.

N. C., Asheville.—T. C. and Frank Smith; convert building into store and warehouse.

N. C., Monroe.—Monroe Hardware Co.; erect 4-story building; 80x183 ft.; reinforced concrete flat slab design; brick panel walls; steel sash; bids until April 19; plans and specifications at office T. A. MacEwan, Engr., Realty Bldg., Charlotte, N. C.

S. C., Anderson.—G. H. Bailes; erect \$25,000 2-story brick building; 42x100 ft.; Indiana limestone; tile floors; Casey & Fant, Archts.

S. C., Timmonsville.—Dr. T. H. Houck; rebuild business block noted burned at loss of \$50,000.

Tex., Amarillo.—Merchants' Produce Co.; erect \$200,000 building; 50x300 ft.

Tex., Fort Worth.—W. J. Mays; erect \$10,000 store; 1 story; brick.

Tex., San Antonio.—Wm. Wurzbach; erect 3 store buildings; fireproof; reinforced concrete; Beverly Spillman, Archt.

Tex., Waco.—Waco Drug Co.; erect 4-story-and-basement concrete building; 90x132 ft.; concrete roof and floors; steam heat; freight elevator and chutes; bids opened about May 20 or June 1. Address E. McIver Ross, Archt.

Va., Roanoke.—National Grocery Co.; erect 4-story brick building; \$68,000.

## Theaters.

Fla., Orlando.—R. Beacham, Jr.; erect theater; seating capacity 1000; also erect several store and office buildings.

Ky., Ashland.—S. L. Martin and associates; erect theater, store and office building; 3 stories; 75-ft. frontage; theater to seat 2000.

N. C., Reidsville.—D. A. Hendrix; erect theater; 110x40 ft.; brick; ornamental terra-cotta; interior tile; wood floors; metal ceilings; ventilators; Jas. Hopper, Archt., Leaks-ville, N. C. (Lately noted.)

S. C., Anderson.—W. W. Sullivan; rebuild theater lately noted burned; leased by S. A. Lynch Enterprises; auditorium to seat 700; \$75,000; Zink-Sparklin-Gondolfo, Inc., Archts., Munsey Bldg., Washington, D. C.

## Warehouses.

Ala., Florence.—Wofford Oil Co., Birmingham; erect \$25,000 building.

Ark., Fort Smith.—Fort Smith Compress Co.; erect \$250,000 fireproof warehouse; steel and concrete.

Ga., Savannah.—Sugar Products Co., Harvey J. Gilbert, Agt.; erect 500,000-gal. storage tank.

Ky., Lexington.—Fayette Tobacco Warehouse Co., Dr. Samuel H. Halley, Prest.; erect \$200,000 warehouse; 612x200 ft.; brick, steel and concrete; 200 tons steel required; private railroad switch; capacity 1,000,000 lbs.; Frankel & Curtis, Archts.

La., Lake Charles.—H. W. Lang; erect \$30,000 storage warehouse; 100x200 ft.; brick and metal; composition roof; wood or concrete floors. (Lately noted.)

La., Monroe.—Ouachita Flour & Feed Co.; erect brick warehouse.

Md., Baltimore.—Stewart Son & Co., Eastern Ave. and President St.; erect \$25,000 warehouse, 803-09 Eastern Ave.; 2 stories; 53x100 ft.; Haskell & Barnes, Archts., 301 N. Charles St.

Mo., Louisiana.—Stark Seed Co.; erect \$50,000 warehouse; 2 stories and basement; 50x

100 ft.; brick and reinforced concrete; Barnett, Haynes & Barnett, Archts., Syndicate Trust Bldg.

N. C., Hertford.—Perquimans County Cotton Assn., W. G. Newby, Prest.; erect \$50,000 warehouse.

N. C., Warsaw.—Storage Warehouse Co. chartered; \$50,000 capital; J. H. Newbury, Prest.; J. H. Carter, V.-P.; A. B. Baines, Secy.-Treas.

S. C., Florence.—Jake Berger; plans to erect tobacco warehouse; corrugated iron.

S. C., Florence.—Florence Storage Warehouse Co. incptd.; \$55,000 capital; T. B. Young and associates; erect \$25,000 potato warehouse at Florence, \$15,000 structure at Timmons ville; also considering erection \$10,000 building in Lake City.

S. C., Greenville.—C. C. Hindman, Chrmn. Committee promoting company to erect cotton warehouses.

S. C., Lake City.—Florence Storage Warehouse Co.; considering erection \$10,000 potato warehouse. (See S. C., Florence.)

S. C., Timmons ville.—Florence Storage Warehouse Co.; erect \$15,000 potato warehouse. (See S. C., Florence.)

Tenn., Memphis.—B. F. Avery & Son, Hal B. Howard, Mgr.; erect \$350,000 building; steel and concrete; 7 stories; 150,000 sq. ft. floor space.

Tex., Vernon.—South Bend Production & Supply Co., B. H. Estes, Mgr.; erect warehouse.

Va., Richmond.—Warehouse Realty Corp.; erect \$150,000 warehouse; 4 stories; 70x220 ft.; reinforced concrete; brick curtain walls; tar and gravel roof; concrete floors; metal doors; heating, \$5000; elevators, \$10,000; M. E. Wright, Archt.; Wise Granite & Construction Co., Contr., both American Natl. Bank Bldg.; J. C. Roelker, Engr., Mutual Bank Bldg. (Lately noted.)

tuberculosis hospital; R. M. Grissman, Contr., Oklahoma City. (Previously noted.)

### Railway Stations, Sheds, Etc.

D. C., Washington.—Washington, Baltimore & Annapolis Electric R. R. Co., J. J. Doyle, Gen. Mgr., Park Avenue Terminal, Baltimore; erect railway terminal, 12th and H Sts.; Carre & Hastings, Archts., 52 Vanderbilt Ave., New York; Lorain Steel Co., Lorain O., Contr. at \$76,000 for steel. (Previously noted.)

### Schools.

Ala., Birmingham.—Jefferson County Board of Education, N. F. Baker, Supt.; erect elementary school at Gardendale; \$22,975; Inglenook Construction Co., Contr. (Lately noted.)

Mo., Cantwell.—Cantwell School Dist.; erect \$20,700 grade school; 54x85 ft.; 2 stories; brick and concrete; wood floors; composition roof; heating plant, \$4000; R. L. Sanneman, Archt., Reserve Bank Bldg., Kansas City; Mo.; Geo. H. Gassman, Archt., Charleston, Mo. (Lately noted.)

Mo., Desloge.—Board of Education; erect \$80,850 high school; 114x79 ft.; 3 stories; brick, concrete, stone; composition roof; wood floors; heating plant, \$20,000; R. L. Sanneman, Archt., Reserve Bank Bldg., Kansas City; Mo.; Geo. H. Gassman, Contr., Charleston, Mo. (Lately noted.)

Mo., St. Louis.—Board of Education, E. J. Harper, Prest.; erect Buder grade school; 3 stories; 94x120 ft.; \$351,474; R. M. Milligan, Archt., Board of Education Bldg.; Murch Bros. Construction Co., Contr., Railway Exchange Bldg. (Lately noted.)

Okla., Duncan.—School Board; erect \$75,000 building; reinforced concrete and brick; tar and gravel roof; wood floors; steam heat; Jewel Hicks, Archt., Oklahoma City; Manhattan Construction Co., Contr., Muskogee; materials purchased. (Lately noted.)

Okla., Grandfield.—Board of Education; erect \$110,000 high school lately noted; unit system; 2 stories and basement; 214x184 ft.; brick and stone; asphalt and gravel roof; wood floors; steam heat; city lighting; Tonini & Bramblett, Archts., Terminal Bldg., Oklahoma City. Address W. E. Corlett, Contr. Vinita, Okla. (See Machinery Wanted—Blackboards; Chalk Trays; Asphalt Shingles; Cement; Brick.)

Tex., Little River.—School Board; erect building for Little River, Academy and Heidenheimer Dist.; 2 stories; frame; \$10,000; Baker Bros., Contrs., Temple, Tex.

Va., Norfolk.—Catholic Church of Sacred Heart; erect \$70,000 parochial school; contract let. Address The Pastor.

### Stores.

Fla., Ybor City.—Max Argintar and Louis Wohl & Sons; erect \$25,000 building; brick; Mugge Construction Co., Contr.

Fla., Ybor City.—Louis Wohl & Sons and Max Argintar; erect \$25,000 building; 1 story; 60x95 ft.; brick; Barrett roof; wood and concrete floors; all material purchased; Francis J. Kennard, Archt., American Natl. Bank Bldg.; Mugge Construction Co., Contr., Ray View Hotel; both Tampa. (Lately noted.)

Ky., Ashland.—J. H. McCleary; erect \$50,000 addition to department store for W. E. Faulkner; 25x142½ ft.; 2 stories and basement; brick; concrete and hardwood floors; metal ceilings; tin roof; wire-glass; vault lights; ventilators; J. M. King, Archt., Gaylord Bldg.; Ellswick & Ramey, Contrs. (Lately noted.)

La., Monroe.—Mrs. R. J. Cosper; erect 3-story business building; 63x70 ft.; mat brick; terra-cotta trim; tile roof; apartments on second floor; Wm. Drago and Mil-

## BUILDING CONTRACTS AWARDED

### Apartment-Houses.

Ga., Atlanta.—William Candler, Benjamin D. Watkins & Co., Agts.; erect \$1,000,000 apartment building; 7 stories; reinforced concrete; fireproof; 150 suites, 2 to 8 rooms each; Henry Hornbostel, Archt., 63 William St., New York; Tufts Construction Co., Contr. (Previously noted.)

N. C., Gastonia.—Armstrong Land & Investment Co., C. B. Armstrong, Prest.; erect \$150,000 combination apartment and hotel building; 3 stories; 36x115 ft.; 9 suites, 6 rooms each; 36 hotel rooms; brick and tile; tin roof; wood floors; steam heat; C. C. Wilson, Archt., Columbia, S. C.; J. L. Glenn, Contr., Gastonia.

### Association and Fraternal.

Fla., De Funiak.—Ancient Free and Accepted Masons; erect \$23,000 building; 2 stories; brick; stores, 1st floor; contract let.

### Bank and Office.

Ga., Columbus.—Merchants and Mechanics' Bank, J. S. Key, Prest.; remodel and erect addition; 30x140 ft.; 1 story; reinforced concrete and brick; metal roof; marble floors; steam heat, \$3000; electric lights; T. W. Smith, Archt.; M. C. Barlow, Contr.; Krueger Mfg. Co., Atlanta, Ga., Contr. for fixtures, \$30,000. (Lately noted.)

La., New Orleans.—Marine Bank & Trust Co., L. M. Poole, Prest.; erect annex; Geary, Oakes, Inc., Contr., Perrin Bldg. (Previously noted.)

Md., Baltimore.—Seaboard Bank, Park Ave. and Fayette St.; alterations to building; brick and stone; marble and tile floors; Robt. L. Harris, Archt., Calvert Bldg.; Frairie Bros. & Haigley, Contrs., 18 Clay St.

Md., Baltimore.—Levering Coffee Co., 102 Commerce St.; erect \$60,000 office building, 105-107 South St.; 4 stories; 53x64.10 ft.; brick; terra-cotta and concrete; Smith & May, Archts., Calvert Bldg.; Consolidated Engineering Co., Contr., Calvert Bldg. (Lately noted.)

W. Va., Wheeling.—Conservative Life Insurance Co., C. E. Peters, Prest.; expend \$100,000 for 2-story addition and improvements; terra-cotta, steel and hollow tile; reinforced concrete floors and roof; F. F. Farris, Archt. and Engr., Schmulbach Bldg.; Geo. R. Butts & Son, Contrs. (Lately noted.)

### Churches.

Ga., Lagrange.—Presbyterian Church; erect \$60,000 building; Calhoun Construction Co., Contr., Anniston, Ala.

Mo., Springfield.—First Christian Church; expend \$18,000 for alterations; Walter C. Hawkins, Contr.

N. C., Boone.—Methodist Church, Rev. H. F. Powell, pastor; erect \$25,000 building; Robt. Campbell, Contr., Lenoir. (Previously noted.)

### Dwellings.

Ark., Forrest City.—Mrs. William James; erect residence; contract let.

Fla., Tarpon Springs.—J. F. Buck, Philadelphia; reported to erect 6-room residence; F. J. Heymen, Contr., Tarpon Springs. (Lately incorrectly noted at Tampa.)

Mo., Claryton.—Jas. W. Bemis, Arcade Bldg., St. Louis; erect \$40,000 residence; 84x47 ft.; 2 stories; slate roof; hardwood and concrete floors; hot-water heat; hollow fireproof tile; metal ceiling; interior tile; P. J. Bradshaw, Archt.; R. W. Morrison Construction Co., Contr.; both International Life Bldg., St. Louis. (Lately noted.)

Mo., Hamilton.—P. A. Switzer; erect \$15,000 residence; 2 stories and basement; 40x50 ft.; brick; stone trim; tile roof; oak and asbestos floors; Brostrom & Drotts, Archts., 401 Reliance Bldg., Kansas City; C. F. McLean, Contr., Cameron, Mo. (Lately noted.)

S. C., Greenwood.—Lander College; erect \$100,000 addition; 3 stories; 42x120 and 60x138 ft.; brick and wood; tin roof; wood floors; low pressure steam heat; city lighting; Thos. W. Cothran, Archt.-Contr.

Tex., San Antonio.—Gus Kray; erect 5-room tile and stucco residence; Atlee B. Ayres, Archt.; Jno. Westerhoff, Contr.

Va., Cape Charles.—Dr. C. L. Nottingham; erect \$20,000 residence; 2 stories; 42x48 ft.; brick; asbestos slate roof; wood and concrete floors; hot-air heat; electric lights; Diehl & Vance, Archts., Virginia-Carolina Bldg., Norfolk. Address C. H. Legg, Contr., Norfolk. (Lately noted.)

### Hospitals, Sanitariums, Etc.

La., Shreveport.—Consolidated Sanitarium Co., Dr. Louis Abramson, Prest.; erect \$500,000 building; 5 stories; 300 ft. front; reinforced concrete; concrete roof; terrazzo floor; hollow fireproof tile; ornamental terra-cotta; interior tile; metal doors; mail chutes; vault lights; ventilators; steel and sash trim; Edw. F. Nield, Archt., Merchants' Bldg.; Garson Bros., Contr., Shreveport; landscape work, Myron H. West, Prest. American Park Builders, Chicago, \$20,000. (Lately noted.)

Okla., Clinton.—State, Dr. A. R. Lewis, Health Commr., Oklahoma City; erect \$74,000



ton King, Archts.; Gehr Construction Co., Contr. (Lately noted.)

Mo., Crisfield.—Webb & Co.; erect \$10,000 store; brick; metal ceiling and roof; pine floors; steam heat; vault lights; Robert Goldsborough, Archt. and Contr.

Mo., Springfield.—W. C. Hawkins; erect \$20,000 store and office building; 47x172 ft.; brick and frame; tar and gravel roof; joist floor construction; city lighting; freight and passenger elevators, \$2300; Haskins & Hoener, Archts., McDaniel Bldg.; Pauly Construction Co., Contr.

Mo., St. Louis.—W. H. Huette Shoe Co., W. B. Huette, Prest.; expend \$10,000 to remodel store; Stephens & Pearson, Archts., Central Natl. Bank Bldg., St. Louis; Jesse I. Gedney, Contr., Arcade Bldg., East St. Louis, Ill. (Lately noted.)

Okla., Oklahoma City.—Dr. J. B. Rolator; erect \$55,000 building for Firestone Rubber Co.; 50x100 ft.; 3 stories and basement; reinforced concrete; hollow fireproof tile; slab roof; concrete floors; interior tile; metal doors; rolling partitions; steel sash and trim; steam heat, \$5500; electric lights; passenger and freight elevators, \$3000; J. W. Van Meter, Archt. and Contr., 300 E. 11th St. (Lately noted.)

Tex., San Antonio.—A. B. Frank; erect 2-story-and-basement fireproof building; Atlee B. Ayres, Archt.; Jay Depuy, Contr.

Tex., San Antonio.—Wong Dun; erect \$25,000 store and apartment building; 2 stories; 60x100 ft.; reinforced concrete; Beverly Spillman, Archt.; K. G. Granberg, Contr. (Lately noted.)

## Theaters.

Tex., El Paso.—Joe Dunne, 314 Trust Bldg.; contract to erect moving-picture theater, 3631 Alameda Ave.; 50x150 ft.; brick and cement; Gold Medal roofing; cement floors; \$20,000. (Lately noted under Stores.)

## Warehouses.

Tex., Houston.—B. A. Reisner; erect \$47,500 warehouse; 5 stories and basement; reinforced concrete and brick; 50x100 ft.; Jas. Antill, Contr.

W. Va., Huntington.—Maier Sales & Service Co.; erect 100x125-ft. warehouse; stone; freight elevator, electric motor, slides, etc.; \$50,000; Huntington Reconstructed Stone Co., Contr. (Lately noted.)

# MACHINERY, PROPOSALS AND SUPPLIES WANTED

**Asphalt Shingles.**—W. E. Corlett, Vinita, Okla.—Asphalt shingles for high school at Grandfield, Okla.; 214x184 ft.

**Bags.**—Crozet Pine & Bracket Co., W. P. Rickers, Crozet, Va.—Second-hand burlap bags.

**Bank Fixtures.**—J. O. Sallee, Prest. First National Bank, Pocatontos, Ark.—Prices on fixtures, vaults, safe for bank.

**Bank Fixtures.**—A. C. Graw, Prest. Citizens' Bank, Homestead, Fla.—Prices on bank fixtures and vault.

**Blackboards.**—W. E. Corlett, Vinita, Okla. Blackboards for high school at Grandfield, Okla.

**Boiler.**—Scudder-Boazman Lumber Co., Lineville, Ala.—40 to 50 H. P. return-tubular boiler; second-hand.

**Boiler.**—Treasury Department, Supervising Archt.'s Office, Washington, D. C.—Bids until May 6; install firebox heating boiler in U. S. Postoffice, Versailles, Ky.; plans with custodian at Versailles and Archt.

**Boiler.**—Treasury Department, Supervising Archt.'s Office, Washington, D. C.—Bids until May 6; install heating boiler in U. S. Postoffice, Chillicothe, O.; plans with custodian at Chillicothe and Archt.

**Boiler.**—Saml. T. Williams, 223 N. Calvert St., Baltimore, Md.—Second-hand 25 to 30 H. P. boiler, upright, with or without stack.

**Boilers.**—Laredo Crate Factory Co., care Laredo Chamber of Commerce, Laredo, Tex. Prices on boilers for woodworking plant, either electric or natural gas power.

**Boilers.**—G. J. Adams, Consult. Engr., 39 South St., New York.—2 vertical 40 to 50 H. P. boilers, 125 lbs. pressure.

**Boilers.**—Thos. W. Biddle, Archt., Clark-Keating Bldg., Cumberland, Md.—Data and prices on boilers for laundry.

**Bottling Equipment.**—T. Poole Maynard, Geological and Industrial Engr., Atlanta, Ga.—Names and addresses mfrs. equipment for mixing and bottling paste; glass and paraffin paper box containers.

**Braiding Machines.**—Mattoon Packing Co., W. V. Mattoon, 705 Elm St., Dallas, Tex.—Names and addresses mfrs. braiding machines for flax and other packings.

**Brick.**—W. S. Dodd, V. P. First National Bank, Coeburn, Va.—Prices on hard brick for 2-story building, 25x125 ft.

**Brick.**—W. E. Corlett, Vinita, Okla.—Common brick for 2-story-and-basement high school at Grandfield, Okla.; 214x184 ft.

**Bridge.**—W. T. Gates, Prest. White Horse Coal Co., Flemington, W. Va.—Material for complete suspension foot bridge; span 230 ft.; ropes and hangers.

**Bridge Construction.**—Crittenden County Commrs. Road Improvement Dist. No. 4, G.

W. Sims, Chrmn., Lyceum Bldg., Memphis, Tenn.—Bids until Apr. 19; 120-ft. bridge over Fifteen-Mile Bayou; five 20 to 120-ft. I-beam and truss spans; plans, etc., on file.

**Bridge Construction.**—Little Rock-Spring Lake Highway Dist., W. R. Bathurst, Secy., Boyle Bldg., Little Rock, Ark.—Bids until April 22; steel bridge over Fourche Bayou; two 100-ft. steel spans; 19-ft. roadway; plans, etc., with Secy. and Lund & Hill, Engrs., 527 Southern Trust Bldg.

**Bridge Construction.**—W. S. Keller, State Highway Engr., Montgomery, Ala.—Bids until May 10; 450-ft. bridge and approaches over Pea River, in Dale County, between Arlton and Brundidge; 6084 sq. yds. pavement; plans, etc., with State Highway Engr. and State Highway Dept., Bell Bldg., Montgomery.

**Building Material.**—Sidney Day, Huntington, W. Va.—Prices on building material for church, 60x90 ft.

**Building Material.**—Geo. F. Sansbury, Cumberland, Md.—Prices and samples on face brick, balanced sash, tile roofing, terra-cotta trim, etc., for office building, 116x100 ft.

**Building Material.**—Hugh F. Little, Asst. Treas. Marion Manufacturing Co., Marion, N. C.—Interested in plans, building material, metal laths, heating plant, electric-lighting equipment, etc., for bungalow.

**Building Materials.**—T. D. Martin, Florence, S. C.—Building materials for 225x70-ft. stemmery.

**Candy Machines.**—J. T. Givens, Wilson St., Rock Hill, S. C.—Names and addresses mfrs. cotton candy mchy.

**Cars.**—C. W. Boyd, Richlands, Va.—S to 10 logging cars.

**Cars.**—Robt. R. Nixon, 703 James Bldg., Chattanooga, Tenn.—Twenty-five 6-yd. side-dump quarry cars, standard gauge, square box dump type, wooden sides and bottom; twenty 2-yd. 2-way all-steel side-dump cars, 36-in. gauge; new or second-hand; delivery Atlantic seaboard.

**Castings, etc.**—Treasury Dept., Bureau Engraving and Printing, Washington, D. C.—Bids until May 3 to furnish: Castings; postage stamp, internal revenue and check paper, etc. Blank forms on application.

**Cement.**—Planters' Gin & Trading Co., J. B. Alsbrook, Secy., Greelyville, S. C.—75 bbls. cement.

**Cement.**—W. E. Corlett, Vinita, Okla.—Cement for high school at Grandfield, Okla.

**Cement.**—United States Engr. Office, Wheeling, W. Va.—Bids until May 8 to furnish 15,000 bbls. American Portland cement for Dam No. 27, Ohio River.

**Chalk Trays.**—W. E. Corlett, Vinita, Okla.

Chalk trays for high school at Grandfield, Okla.

**Chimney.**—Raleigh-Wyoming Coal Co., Carl Scholz, Gen. Mgr., Charleston, W. Va.—To contract for 10x145-ft. concrete chimney.

**Clock (Time).**—Inman Builders' Supply Co., W. M. Moore, Mgr., Inman, S. C.—Employees' time clock.

**Concrete Block.**—Limestone Products Co., Bluefield, W. Va.—Concrete block mchy.; quick delivery.

**Cotton Machinery.**—H. M. Sternbergh, Reading, Pa.—To buy cotton mchy. up to 30,000 spindles; new or used; acting for San Francisco exporter.

**Crane.**—Saml. T. Williams, 223 N. Calvert St., Baltimore, Md.—10-ton capacity locomotive crane, 35 to 50-ft. boom, standard-gauge track.

**Cranes.**—Chicago Foundation Co., 76 W. Monroe St., Chicago, Ill.—Two 8-wheel locomotive cranes with 46-ft. booms; M. C. B. throughout; send specifications, where located, age, price f. o. b. shipping point.

**Crusher.**—Limestone Products Co., Bluefield, W. Va.—Limestone rock crusher; quick delivery.

**Crushing Plant.**—United Machine Works, 57 W. 3d St., New York.—Crushing plant, including No. 4 or 5 crusher, conveyors, screens, etc.

**Drainage System.**—Critz & Critz, West Point, Miss.—To let 4,000,000 yds. drainage system contract.

**Dragline.**—H. C. Clark, Lafayette, La.—Second-hand one-yard caterpillar dragline; kerosene operated; first-class condition; price, delivery and location.

**Dredge.**—Robt. R. Nixon Co., 703 James Bldg., Chattanooga, Tenn.—New or second-hand broad-gauge dredge, 1½-yd. orange-peel on 70-ft. boom, 440-volt, 3-phase, 60-cycle, A. C.; delivery Atlantic seaboard.

**Dredging Machinery.**—John R. Cochran, Box 236, Augusta, Ga.—Dredging mchy. for Savannah River.

**Drilling Machinery.**—J. W. Wellborn, R. No. 1, Thomasville, N. C.—Correspondence with mfrs. drilling mchy. to penetrate rock.

**Drykiln.**—Scudder-Boazman Lumber Co., Lineville, Ala.—10,000 to 15,000-ft. capacity drykiln for pine lumber; Moore preferred; second-hand.

**Electric Equipment.**—Maryland Equipment & Supply Co., Box 894, Baltimore, Md.—250 to 500 K. W. generator, 2300 volts, 60-cycle, 2-phase, direct connected to horizontal turbo condensing unit; with accessories; give location and price.

**Electrical Equipment.**—See Building Material.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

**Electrical Equipment.**—T. D. Martin, Florence, S. C.—Electrical equipment for 225x70-ft. stemmery.

**Electrical Equipment.**—Newcastle Light, Power & Ice Co., R. H. Helm, Secy.-Treas., Newcastle, Tex.—Poles, transformers, wire, supplies, building material, etc.

**Electric-Light Systems, etc.**—W. M. White, Blackstone, Va.—To represent mfrs. of isolated electric lighting and water systems.

**Electric Plant.**—Lime Hill Stone & Lime Co., Flemington, W. Va.—100 K. W. 250-volt to 200 K. W. complete electric-power plant for 1000 tons daily capacity pulverized lime and crushed stone plant.

**Electric Plant.**—City of Kinston, N. C. Joe Dawson, Mayor.—Bids until May 11; power plant equipment: 1500 K. W. 1875 K. V. A. at 80 per cent P. F. turbo-generator unit; surface condenser complete with dry vacuum and hot well pumps; 25 K. W. turbine-driven exciter unit; 7-panel switchboards; two 25 K. W. 6.6 amp. series street-lighting transformers; 2 horizontal motor-driven centrifugal circular pumps; two 500 H. P. 225-lb. horizontal water-tube boilers; 1500 H. P. open-feed water heater; 2 superheaters; 2 underfeed mechanical stoker units complete; 2 outside end packed pot valve type boiler-feed pumps; 2 sets automatic feed-water regulators; brick chimney; plans, etc., from W. C. Olsen, Const. Engr., Sumter, S. C.

**Elevators.**—Henry LaPointe, Archt., 212½ 12th St., Miami, Fla.—Prices on electric passenger elevator; hydraulic plunger or electric freight elevator.

**Enameling Equipment.**—George W. Ketteringham, 1028 Milan St., New Orleans, La. Equipment to enamel metalware, plumbing fixtures, etc.

**Engines.**—Thos. W. Biddle, Archt., Clark-Keating Bldg., Cumberland, Md.—Data and prices on engines for laundry.

**Engine.**—City Light & Water-works, M. Lipscomb, Supt., Carthage, Mo.—Prices on 75 or 100 H. P. crude oil engine, Diesel type.

**Engine.**—Stanley Ice Co., F. P. Poole, Gen. Mgr., Stanley, Va.—Prices on 25 H. P. kerosene engine; heavy duty, continuous stationary; for 6-ton ice plant; second-hand preferred.

**Engines.**—Laredo Crate Factory Co., care Laredo Chamber of Commerce, Laredo, Tex. Prices on engines for woodworking plant, either electric or natural gas power.

**Foundry Equipment.**—Hydraulic Machinery Mfg. Co., Port Neches, Tex.—Foundry equipment.

**Gasometers.**—G. J. Adams, Const. Engr., 30 South St., New York.—1 or 2 S. H. gasometers, 400 to 800 cu. ft. capacity.

**Generators, etc.**—Laredo Crate Factory Co., care Laredo Chamber of Commerce, Laredo, Tex.—Prices on generators, pulleys, etc., for woodworking plant, either electric or natural gas power.

**Glass (Plate).**—Planters' Gin & Trading Co., J. B. Alsbrook, Secy., Greelyville, S. C. 6 to 10 pieces plate glass, 72x90 to 90x90.

**Grain Elevator Equipment.**—P. L. Jacobson, 522 Grain Exchange Bldg., Oklahoma City, Okla.—Clippers, cleaners and drier for 1,200,000-bu. grain and handling elevator.

**Heating Plant.**—See Building Material.

**Inclinator.**—Crozet Pin & Bracket Co., W. P. Bickers, Crozet, Va.—Small inclinator or burner for shavings and sawdust.

**Iron.**—Southern Wire & Iron Works, 59 Martin St., Atlanta, Ga.—1x1½-in. angle iron.

**Lamps.**—City of Baltimore, Md., William F. Broening, Mayor.—Bids until April 14 for furnishing Dept. of Public Safety with formaldehyde lamps for one year; C. Hamp-

son Jones, Commr. of Health; plans, etc., on file.

**Laundry Equipment.**—D. W. Pinkston, Sparta, Ga.—Names and addresses mfrs. steam laundry equipment.

**Laundry Equipment.**—Thos. W. Biddle, Archt., Clark-Keating Bldg., Cumberland, Md.—Data and prices on laundry equipment.

**Levee Construction.**—Mississippi Levee Commrs., Greenville, Miss.—Bids until April 16; construct 200,000 cu. yds. levee; W. L. Thompson, Chief Engr.

**Loader.**—C. W. Boyd, Richlands, Va.—Decker loader.

**Lock Construction.**—U. S. Engr. Office, Louisville, Ky.—Bids until April 16; construct lock and abutment for dam No. 45, Ohio River, at Addison, Ky.

**Locomotive.**—C. W. Boyd, Richlands, Va.—20 to 25-ton geared locomotive.

**Locomotive.**—Pennsylvania Equipment Co., 1420 Chestnut St., Philadelphia, Pa.—55 to 70-ton Mogul or Prairie type locomotive, not smaller than 18x24; wheel centers 48 in.; wagon-top boiler, 150 lbs. steam pressure; tender with capacity 3500 to 4000 gals. water.

**Lumber.**—Crozet Pin & Bracket Co., W. P. Bickers, Crozet, Va.—Virginia locust wood.

**Machine Tools.**—Hydraulic Machinery Mfg. Co., Port Neches, Tex.—Machine shop equipment.

**Metalworking Machinery.**—George W. Ketteringham, 1028 Milan St., New Orleans, La. Stamping presses for heavy work.

**Metalworking Machinery.**—Hydraulic Machinery Mfg. Co., Port Neches, Tex.—Sheet metalworking mch.

**Metal Products.**—Mrs. B. A. Wright, Route No. 1, Hurdles Mill, N. C.—To order construction of model for clothes boiler and canning device.

**Mining Machinery.**—International Coal Mines, D. H. Echols, Mgr., Eagle Pass, Tex. Prices on short wall coal-cutting machines.

**Moulds.**—Ezell-Pritchard Co., 14 W. 5th St., Charlotte, N. C.—Moulds for plaster-paris cornices and beams.

**Mine Supplies.**—International Coal Mines, R. H. Echols, Mgr., Eagle Pass, Tex.—Prices on coal mine supplies.

**Paving.**—Joint Committee on Streets, Street Cleaning and Sewers, N. B. Handy, Chrmn., Lynchburg, Va.—Bids until April 20; pave Jefferson and Ninth Sts.; 2800 sq. yds. concrete; 2800 sq. yds. granite block; bituminous and gravel filler; plans, etc., with C. L. De Mott, City Engr.

**Paving.**—City, J. W. Motte, Director Public Works, Savannah, Ga.—Bids until April 22; resurface and repave W. Broad St.; 55,000 sq. yds.; plans, etc., on file.

**Piping.**—W. I. Alexander, Bowling Green, Ky.—8 and 6¼-in. casing.

**Pipe.**—J. A. Collins, 5413 Vine St., Philadelphia, Pa.—Two 1200 ft. 6-in. pipe for oil.

**Piping.**—F. T. Parker Co., F. T. Parker, Propr., Columbia, S. C.—Prices on 700 ft. 2½-in. black piping; new or second-hand; for steam.

**Pipe.**—City of Winder, Ga., John T. Maynard, Mayor.—8-in. terra-cotta sanitary pipe.

**Piping.**—Swanson Co., 5 N. Robinson St., Oklahoma City, Okla.—Six ¾-in. 17-lb. casing, six ½-in. 24-lb. casing, 2-in. 1800-lb. tubing, 2-in. 1200-lb. test line pipe.

**Plumbing Supplies.**—George W. Ketteringham, 1028 Milan St., New Orleans, La.—Brass drains for kitchen sinks; from ½ in. up.

**Potato Chips Machines.**—E. G. Cook, Box 325, Richmond, Va.—Data on machines and necessary equipment for producing potato chips.

**Press.**—Pennsylvania Equipment Co., 1420 Chestnut St., Philadelphia, Pa.—Second-hand straight side press, 24 to 32-in. between housings, 14-ft. closed height, 4½-in. diam. crankshaft 5-in. stroke.

**Printing Plant.**—Press Publishing Co., Clyde C. Stogner, Secy., 715 American National Insurance Bldg., Galveston, Tex.—Prices on complete printing plant for daily capacity 15,000 circulation.

**Pulverizer.**—Limestone Products Co., Bluefield, W. Va.—Limestone rock pulverizer; quick delivery.

**Rails.**—F. L. White, Philadelphia, Miss.—10,000 ft. 12-lb. steel rails for brick cars.

**Road Construction.**—St. Tammany Parish Police Jury, J. C. Grant, Chrmn., Covington, La.—Bids until April 17; 25 mi. earth road; M. C. Huckaby, Engr.

**Road Construction.**—St. Tammany Parish Police Jury, J. C. Grant, Chrmn., Covington, La.—Bids until May 8; 35 mi. gravel road; M. C. Huckaby, Engr.

**Road Construction.**—Jackson County Commissioners, Independence, Mo.—Bids until April 19; 3 mi. Lone Jack East road; bituminous macadam; \$74,906.92; A. W. Graham, State Highway Engr., Kansas City, Mo.

**Road Construction.**—Conway-Damascus Road Improvement Dist., Faulkner County, Conway, Ark.—Bids until April 15; 22 mi. bituminous macadam penetration method road; \$350,000 available; Parkes Engineering Co., Engr., 201 Citizens' Bank Bldg., Pine Bluff, Ark.

**Road Roller.**—Harvey Co., 113 South St., Baltimore, Md.—Dealers' prices and data in duplicate on 10-ton gasoline road roller; state delivery.

**Rolling Partitions.**—W. R. Land, Prest. School Board, Hamlet, N. C.—Prices on rolling partitions for school.

**Sawmill.**—C. W. Boyd, Richlands, Va.—6 or 7-ft. band mill complete.

**Naphthalene Flakes.**—Mason Drug Co., Hancock, Md.—500 to 1000 lbs. naphthalene flakes; Baltimore dealers preferred.

**Oil Burners.**—Shields M. Bishop, 904 4th Ave., Richmond, Va.—Names and addresses mfrs. crude oil burners for steam boilers.

**Paving.**—City, J. I. Lee, Mayor, Demopolis, Ala.—Bids about May 1; 14 blocks street; asphalt or Portland cement concrete; \$90,000 available; Robert L. Totten, Const. Engr., Birmingham, Ala.

**Paving.**—City of Florence, Ala.—Bids until April 13; 26,000 sq. yds. paving; sheet asphalt, vitrified brick, bitoslag, concrete, asphaltic concrete or bitulith on macadam or concrete base; curb, gutter and drainage on Morrison and Wood Aves.; blanks on file with W. M. Paxton, City Engr.

**Pipe Fittings, etc.**—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until April 21 to furnish: Track bolts; grip nuts; rivets; nails; pig-lead; duplex pumps; pipe fittings; cocks; valves; ship cane feeders; binoculars; sextants; aluminum-ware; saws; fiber wheels; steam hose; boiler lagging; packing; mattress tufts; canvas; cotton line; napkins; toweling; paint; wrapping paper; screen doors, etc. Blank forms and information (Circular 1360) on application to offices of: Panama Canal; Asst. Purchasing Agents at 24 State St., New York; 606 Common St., New Orleans; Fort Mason, San Francisco; United States Engr. offices throughout country.

**Rails.**—Buena Vista Hardwood Co., Stony Bottom, W. Va.—16, 18 or 20-lb. relaying steel for 1½ mi. track, with bars and spikes; prompt shipment.

**Road Construction.**—Howell County, Ward Ellis, Clerk, West Plains, Mo.—Bids until April 23; plans 350 to 400 mi. road; grade and gravel 50 mi. road; \$620,000 available; A. V. Elston, Engr.

**Road Construction.**—Coleman County, L. G. Matthews, Judge, Coleman, Tex.—Bids until April 14; 42.17 mi. crushed rock or gravel road in Precinct No. 2; 110,000 cu. yds. crushed rock or gravel; 116,715 lbs. reinforcing steel; plans, etc., on file at Coleman, with W. E. Dickinson, County Engr., Coleman, and Grady Adams, Santa Anna, Tex.

**Road Construction.**—Tennessee Department Highways, Nashville, Tenn.—Bids until May 5; 11.872 mi. State Highway No. 10 between Williamson County line and Columbia; 138,277 sq. yds. bituminous macadam or rock asphalt surface course; bridge over 20-ft. span; 86,670 lbs. structural steel; plans, etc., on file at Nashville and with County Clerk at Columbia, Tenn.

**Road Construction.**—Avoyelles Highway Comsn., J. W. Joffrion, Chrmn., Marksville, La.—Bids until April 27; grade, drain and construct cement-concrete drainage structures on 8 mi. Moncla-Center Point Highway; plans, etc., with W. E. Atkinson, Consult. Engr.

**Road Construction.**—Fayette County Commrs., C. E. Mahan, Clerk, Fayetteville, W. Va.—Bids until May 3; 5.7 mi. road in Mountain Cove Dist.; 7 mi. road in Quinnimont Dist.; specifications, etc., with J. K. McGrath, Road Engr.

**Road Construction.**—W. S. Keller, State Highway Engr., Montgomery, Ala.—Bids until May 10; 6.3 mi. State Trunk road No. 15 in Choctaw County; 16,389 cu. yds. sand-clay surfacing; plans, etc., with State Highway Engr. and State Highway Dept., Bell Bldg., Montgomery.

**Road Construction.**—State Highway Dept., Geo. M. Francis, Secy., Dover, Del.—Bids until May 12; 15.66 mi. State and State-aid highways in New Castle and Sussex counties; Chas. M. Upham, Ch. Engr., Dover.

**Road Construction.**—Union County Commissioners Road Improvement Dists. Nos. 1, 2, 3 and 4; W. T. Flournoy, D. McDonald, J. M. Wallace, G. P. Sewell, respective Secys. of each Dist., El Dorado, Ark.—Bids until May 5; Dist. No. 1, 21.50 mi. gravel macadam road; Dist. No. 2, 54.78 mi. gravel macadam road; Dist. No. 3, 40.32 mi. gravel road; Dist. No. 4, 68.36 mi. gravel macadam road; plans, etc., with Commrs. El Dorado and State Highway Dept., Little Rock; also for Dists. 1 and 2 with Ford & MacCrea, Engrs., 325 Gazette Bldg., Little Rock; for Dist. No. 3 with Carter & Knoch, Engrs., 803 A. O. U. W. Bldg., Little Rock; Dist. No. 4 with C. S. Christian, Engr., Texarkana, Ark.

**Roofing.**—See Building Material.

**Roofing.**—H. E. Cole, Winter Park, Fla.—Prices on 600 or 700 sq. ft. corrugated iron roofing, 8 or 10-ft. lengths; state condition and quantity.

**Safe.**—See Bank Fixtures.

**Safes.**—Vienna National Bank, B. F. A. Myers and others.—Prices on bank safes.

**Sash.**—See Building Material.

**Sash and Door Machinery.**—Lakeland Mfg. Co., Lakeland, Fla.—Sash and door mchy.

**Sawmill.**—Scudder-Boazman Lumber Co., Lineville, Ala.—No. 3 or 5 Wheeling sawmill; second-hand.

**Sawmill.**—J. H. N. Cobb, Sapulpa, Okla.—Sawmill to quarter saw red and white oak timber in Virginia.

**Sawmill.**—W. C. Brock, care Weis & Lesh Plant of Motor Wheel Corp., Memphis, Tenn. Hardwood dimension mill.

**Saws, etc.**—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until April 29 to furnish: Power hacksaw; showcases; dies or chasers; hand

trucks; copper cloth; fire and foundry clay; coal tar pitch; fire and salt bricks; dinner knives; chinaware; rubber boots; cork-board; artificial leather; sheet packing; lumber, etc. Blank forms and information (Circular 1361) on application to offices of: Panama Canal; Asst. Purchasing Agents at 24 State St., New York; 606 Common St., New Orleans; Fort Mason, San Francisco; United States Engr. offices throughout country.

**Screens.**—Shields M. Bishop, 904 4th Ave., Richmond, Va.—Names and addresses mfrs. vibrating and shaker screens.

**Sewers, etc.**—Street Department, Charleston, S. C.—Bids until May 4; lay 17,000 ft. 6 to 30-in. terra-cotta pipe sewer; 16,000 ft. 6 to 30-in. terra-cotta pipe drain; 5600 ft. reinforced concrete drain; J. H. Dingle, City Engr.

**Sewer Construction.**—City Commrs., Mat Miser, Commr. Streets, Sewers, etc., Huntington, W. Va.—Bids until April 10; construct 12-in. vitrified tile lateral sewer in alley between Merrill and 3d Aves.; 12-in. vitrified tile lateral sewer on Railroad Ave.; plans, etc., from A. B. Maupin, City Engr.

**Shear.**—Pennsylvania Equipment Co., 1420 Chestnut St., Philadelphia, Pa.—12x18 alligator shear, to cut ½x12-in. cold soft steel.

**Shovel.**—Arkansas Brick & Tile Co., Little Rock, Ark.—Second-hand revolving shovel with 1¼ or 1½-yd. dipper, 20-ft. dumping clearance; quote price and condition.

**Shovel.**—Robt. R. Nixon, 703 James Bldg., Chattanooga, Tenn.—New or second-hand 70-ton electric shovel; 440-volt, 3-phase, 60-cycle, A. C.; delivery Atlantic seaboard.

**Shovels.**—Comal Rock Co., New Braunfels, Tex.—1 or 2 steam shovels, 1-yd. or larger; crawling tractor type preferred; immediate shipment; write or wire.

**Shovel (Steam).**—Harvey Co., 113 South St., Baltimore, Md.—Dealers' prices and data in duplicate on steam shovel, similar to type A Erie; state delivery.

**Showcases.**—Planters' Gin & Trading Co., J. B. Alsbrook, Secy., Greelyville, S. C.—4 to 6 second-hand floor showcases.

**Signs, etc.**—Orion L. Roark, Greenville, Ky.—Names and addresses mfrs. advertising signs, house numbers, etc.

**Skates.**—V. K. Dodge and Fred Bryant, Lexington, Ky.—2000 pairs roller skates.

**Steam Shovel.**—Franklin County, J. Gaiser, Supt. Public Roads, Russellville, Ala.—Small revolving steam shovel for light excavating.

**Steel Sash.**—Thos. W. Biddle, Archt., Clark-Keating Bldg., Cumberland, Md.—Data and prices on steel sash for 28x130-ft. laundry building.

**Steel Shelving.**—Interior Dept., Room 1006, 18th and F Sts. N. W., Washington, D. C.—Bids until April 21; erect additional steel shelving in rooms 400 and 45 in Patent Office Bldg.; plans on file.

**Stone.**—Planters' Gin & Trading Co., J. B. Alsbrook, Secy., Greelyville, S. C.—70 cu. yds. three-quarter crushed stone.

**Terra-Cotta Trim.**—See Building Material.

**Tile.**—W. R. Land, Prest. School Board, Hamlet, N. C.—Prices on hollow fireproof tile; erect \$75,000 school; 125x70 ft.

**Tugboat.**—Kitchen Lumber Co., Ashland, Ky.—Steam tugboat for towing timber in slack water; strong enough to break ice.

**Vault.**—See Bank Fixtures.

**Vending Machines.**—Dudley Gum Co., Nashville, Tenn.—Names and addresses mfrs. vending machines; vend 1-cent package flat gum.

**Ventilators.**—W. R. Land, Prest. School Board, Hamlet, N. C.—Prices on ventilators for school, 125x70 ft.

**Veneer Machinery.**—Phil L. Spurill, Edenton, N. C.—Veneer mchy.

**Wagons.**—Duncan Gillis, City Clerk, De Funiak Springs, Fla.—10 drop-bottom road wagons; quote prices and delivery; second-hand wagons considered.

**Water-works.**—City of Altus, Okla., Ruth Welch, Clerk.—Bids until April 19; extend water-works; plans, etc., from Johnson & Benham, Consult. Engrs., Firestone Bldg., Kansas City, Mo.

**Water Systems.**—See Electric-light Systems, etc.

**Well-drilling.**—Commrs. of Public Works, H. W. Schumpert, Supt. Water-works Dept., Box 333, Newberry, S. C.—Bids invited for drilling 1 or more 300-ft. water wells to accommodate 10-in. piping.

**Wheel Press.**—C. Fred Hunt, Somerset, Ky.—Oil or hydraulic wheel press; for railroad, car and coach wheels; capacity 100 to 125 tons.

**Wire Ties.**—F. N. Cline, Box 90, Orlando, Fla.—Wire ties for tying laths in bundles.

**Woodworking Equipment.**—Edwards Chair Co., Galax, Va.—Barrel stave mchy.; equipment to mfr. some product from 1½-in. square blocks.

**Woodworking Machinery.**—Lakeland Mfg. Co., Lakeland, Fla.—Woodworking mchy., including sash and door equipment.

**Woodworking Machinery.**—Laredo Crate Factory Co., care Laredo Chamber of Commerce, Laredo, Tex.—Prices on crate and basket mchy.; designs for onion, lettuce and cabbage crates, especially double-veneered bushel baskets for spinach and onions.

**Woodworking Machinery.**—A. K. Robins & Co., 116 Market Place, Baltimore, Md.—Names and addresses mfrs. of and dealers in woodworking and milling mchy.

## Railroad Construction

### Railways.

N. C. Swan Quarter.—Ohio capitalists, who plan to drain Lake Mattamuskeet, are also reported planning to build a railroad to connect Swan Quarter and other points in Hyde County with the Norfolk Southern Railroad. The Mayor may be able to give information.

Tex., Anahuac.—Concerning a report that he and others were working on a plan to build a railroad from Nome to Anahuac, Tex., about 25 mi., Capt. W. C. Tyrell of Beaumont, Tex., says that he is only endeavoring to get the Southern Pacific Co. to build the desired line.

Tex., San Angelo.—Kansas City, Mexico & Orient Rwy. Co. proposes to build this year its projected extension from San Angelo via Christoval and Eldorado to Sonora, Tex., and perhaps to Del Rio, to connect with the Southern Pacific. J. M. Weir is Ch. Engr. at Kansas City, Mo.

Tex., Sherman.—St. Louis-San Francisco R. R., it is reported, will spend \$100,000 for improvements at Sherman, including additional yard tracks. F. G. Jonah, St. Louis, Mo., is Ch. Engr.

W. Va., Morgantown.—Contract reported let to the Hanover Construction Co. of Philadelphia to grade extension of the Morgantown & Wheeling Railroad from Morgantown to Mannington, W. Va., 30 mi. Roberts Engineering Co., Charleston, W. Va., is Chief Engr.

### Street Railways.

Mo., St. Louis.—United Railways Co. proposes to reconstruct the St. Charles line at estimated cost of \$140,200; also several other lines at \$917,380. E. D. Smith is Engr.

Tex., Abilene.—American Public Service Co., which will operate the Abilene Street Rwy., is reported about to spend \$60,000 for improvements and extensions.



## INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

### Important Government Sale.

Announcement is made elsewhere in these columns of an important sale of Government material by order of the United States Ordnance Department, and including steel, bronze and factory supplies at United States Warehouse No. 188 (St. James Ave. plant of the Wire Wheel Corporation), Springfield, Mass., the sale to take place on Tuesday, April 27, at 11 A. M., on the premises. There are 5,000,000 pounds of steel in commercial sizes and lengths, 75,000 pounds of bronze and brass scrap, etc., besides belting, grinding wheels, nuts, bolts, factory supplies, assorted hardware, electrical supplies, pipe and fittings, etc. Samuel T. Freeman & Co., auctioneers, 1519-21 Chestnut St., Philadelphia, Pa., will conduct the sale.

### New Power Plant.

Rapidly nearing completion, the new independent power plant of the Conneaut Shovel Co., Conneaut, Ohio, is expected to be in full operation within the next 30 days. With equipment modern in every respect, this plant will develop 1000 horse-power. Although ground was broken only last October, there is only the cornice and part of the stack yet to be completed.

### Half a Century of Business Activity.

Fifty years of active service in the business of the Sherwin-Williams Company of Cleveland, Ohio, were completed on April 1 by S. P. Fenn, its vice-president and treasurer, who enjoys a wide reputation not only in connection with the paint and varnish trade, but also because of his association with the International Y. M. C. A. work, in which he has likewise been actively engaged for more than 25 years. In honor to Mr. Fenn the occasion was appropriately celebrated with a banquet, in which 350 members of the Sherwin-Williams concern and their guests participated. Among those present were several who have worked with him for 40 years or more, and a score of them who have been with the company for more than a quarter of a century, while no one present has seen less than five years of service with it. The business was begun by Henry A. Sherwin at Cleveland in July, 1866, in a little store of 2500 square feet space, and a little less than four years later, in April, 1870, Soren Peck Fenn was employed by Mr. Sherwin as cashier and bookkeeper. The business grew rapidly. In 1880 the Chicago plant was established, and today there are more than 35 distinct manufacturing properties of the company distributed from east to west across this continent, and some of them in foreign countries—England and Australia, for instance. Besides paints and varnishes, the company also manufactures dyes, chemicals, soaps, linseed oil, lithopone, enamels, stains and other products. It has 50 warehouses throughout the world, besides more than 30 retail stores in this country. Mr. Fenn, who with Mr. Sherwin and Mr. Williams, was one of the founders of the business and always actively engaged in its advancement has supported energetically employees' welfare work, the Get-Together Club and other associations within the corporation's circle. He has also had for one of his chief interests the Old Stone Presbyterian Church of Cleveland, in which his membership has continued since 1865, and he has been superintendent of the Sunday-

school since 1910. A director of the Y. M. C. A. since 1868, he was also president for 25 years. He is a native of Tallmadge, Ohio, and was born April 25, 1844.

### Industrial Engineering and Management.

It is announced that M. H. Avram has resigned as president of Slocum, Avram & Slocum Laboratories, Inc., to become president of M. H. Avram & Co., Inc., recently organized with a nominal capitalization of \$500,000 to specialize in industrial engineering and management of industries, with offices at 360 Madison Ave., New York City. It is understood that the new company will closely co-operate with financial institutions and large individual investors to place upon a more stable basis industrial enterprises in which they are interested. Besides Mois H. Avram, president, the official staff includes Howard C. Seaman, vice-president and treasurer, and Garner P. Roney, second vice-president and secretary. Mr. Seaman was until recently treasurer of the E. W. Bliss Company. The directors include men well known in financial and other business circles, among them Finley J. Shepard, Walter C. Teter, F. J. Leary, E. Stewart Peck and others. Organization of this new company is said to have been prompted by increasing needs for more exact means of judging investment risks. It will maintain departments for research, production and management, besides studying markets. Mr. Avram, who will be in direct charge, was during the war consultant for the Government on organization of production for ordnance equipment.

### Office Removal to Charlotte.

The Morse Chain Co. of Ithaca, N. Y., have moved their Greensboro (N. C.) office to Charlotte, N. C., 404 Commercial Bank Bldg. George W. Pritchett, southeastern manager, has found this change advisable to meet conditions resulting from the increased use of Morse silent chains in the various branches of the textile industry. Large and commodious quarters have been secured and they will have a complete exhibit of chain drives in operating order. H. E. Matthews continues with the company.

### Transmission Equipment.

The Lincoln Products Corporation, 320 Market St., Newark, N. J., has just been formed to market transmission equipment in Newark and its vicinity. T. P. Cunningham, president, was formerly sales manager of the transmission department of the Hyatt Roller Bearing Co., and Hyatt roller bearing hangers will be one of the special lines carried at the new establishment. His ability as a transmission engineer will prove of particular value in extending service to manufacturers.

### Half a Million to Enlarge Facilities.

The Carborundum Company of Niagara Falls, N. Y., is to spend approximately \$500,000 to extend and improve its mammoth plant at Niagara Falls and its two big furnace plants, one at Niagara Falls, Ont., and the other at Shawinigan Falls, Quebec. The plan includes a three-story addition to the paper and cloth plant at Niagara Falls in which are manufactured Carborundum paper and cloth, Carborundum Brand Garnet paper and cloth and Aloxite cloth. This addition, recently finished,

is 432 feet long and 81 feet wide, and will provide greater facilities for the storing and curing of all these paper and cloth products, and for the extension of the rubber bonded wheel department. Another addition, just completed, will extend one of the wheel-making and kiln departments, the new building being two stories high, 96 feet long and 64 feet wide. Both of these new structures are of concrete and of the most modern type. Other big extensions and improvements are to be started immediately, and include additions to the crushing departments and other improvements at the furnace plant at Niagara Falls, Ont., where the abrasive Aloxite is made, and at Shawinigan Falls, Quebec, where there is an extensive carborundum furnace plant. Besides these building operations the program calls for the extension of at least 14 different departments at the big Niagara Falls, N. Y., plant. This heavy expenditure in improving its manufacturing facilities will place the company in a better position than ever before to meet the constantly growing demand for its abrasive products.

### General Offices Now in New York.

The general offices of the Chicago Pneumatic Tool Co. on March 31 were transferred to the Chicago Pneumatic Tool Bldg., a new 10-story structure erected for the exclusive use of the company at 6 E. 44th St., New York. Carefully made arrangements rendered possible this jump from Chicago to New York without interference with business except for a brief period. The Chicago district sales branch, previously in the Fisher Bldg., was moved to commodious new quarters at 300 N. Michigan Blvd., and the Chicago service branch has been consolidated with the sales office at this new address. The location is described as ideal for both departments of the Chicago branch, which is under the direction of J. L. Canby.

### Electrical Supplies.

The Carolina States Electric Co., Mercantile Bldg., 218 W. First St., Charlotte, N. C., announces that it is now open and ready for business in the line of electrical supplies and apparatus. The incorporators of the company are Eugene B. Graham, H. T. Long, James P. McMillon and W. A. Emerson.

### Again in Private Practice.

Francis S. Ankrom, 321-324 Hicks Bldg., San Antonio, Tex., on his discharge from the United States Army, opened his office as consulting and supervising architect and engineer, handling building projects, water and sewerage systems and irrigation propositions. While in military service he was supervising engineer of the Arizona district, designing and building Government warehouses and cantonments, one cantonment including erection of all the buildings and the installation of a water and sewer system. Mr. Ankrom will now give particular attention to these lines of work, and he is preparing a booklet on the advantages of the "cost-plus" method of construction.

### Now a Company.

The Southwestern Engineering Co. is the new name of Tuttle, Chamberlain & Co., San Antonio, Tex. The principal members are W. B. Tuttle and Lieut. Col. F. G. Chamberlain, who is at present in the Construction Division of the United States Army. The company will engage in general consulting engineering, with special reference to examinations, reports, appraisal and designs of public utilities, railway properties, irrigation projects, etc. The change is merely that of reincorporating the old company with a larger capitalization to enable it to undertake larger operations than heretofore.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

### Merger of Big Engineering and Construction Companies.

Of general interest is the combination recently announced of the organizations of Westinghouse, Church, Kerr & Co., Inc., engineers and constructors, New York, and Dwight P. Robinson & Company, Inc., constructing and consulting engineers, also of New York. The new company will be called Dwight P. Robinson & Co., Inc., and will occupy executive offices at 61 Broadway and engineering and designing offices in the Grand Central Palace, 125 E. 46th St., New York. Dwight P. Robinson, president of the new company, was for many years president of the Stone & Webster Engineering Corp., and formed his own company in 1918. He has had an unusually valuable experience in the design and construction of industrial plants, large central power stations and hydro-electric plants, and his company, the principals of which left Stone & Webster with him, has specialized in work of this nature. At the time of the merger the Robinson Company had large power plants under construction for the Duquesne Light Co. at Pittsburgh, the Penn Public Service Co. at Johnstown, Pa., and others. Westinghouse, Church, Kerr & Co., Inc., established 36 years ago, has specialized in the design and construction of industrial plants of all kinds, railroad shops and terminals and industrial power plants. It has a long list of important undertakings to its credit. As the activities of the two companies were largely supplemental—each making its own specialized contribution to the new company—it is believed that the new organization will become one of the largest and most successful in the construction and engineering business.

### Trade Literature.

#### Meter Boxes for North and South.

Bulletin AA, issued by the H. W. Clark Company, Mattoon, Ill., and entitled "Northern Meter Boxes," is fully descriptive of the covering housings for water meters in the Central and Northern States. It is stated that protection from frost is perfectly secured by the partial burying of the cover (there being only an 8-inch or an 11-inch lid exposed to the elements) and by the large dead air space within the box, combined with the radiating surface of warm earth at the bottom of the box. The bulletin is finely illustrated to display the features of these products. Bulletin A, "Southern Meter Boxes," is now in press, but will soon be out. It relates to Clark meter boxes adapted to use in the South. Seven other bulletins to complete Catalogue No. 20 are also being printed.

## Financial News

### New Financial Corporations.

Ala., Anniston.—Commercial National Bank, capital \$300,000, surplus \$60,000, will begin business about May 15, occupying building of Alabama Power Co. Chas. R. Bell, Pres.; Arthur Wellburn and S. R. Thompson, V.-Ps.

Ala., Winfield.—Citizens' Bank of Winfield, authorized capital stock \$30,000, \$20,000 paid

in, is chartered. A. M. Grimsley, Pres.; W. L. Roberts, Cash.

Fla., Homestead.—Citizens' Bank, capital \$25,000, is chartered to begin business about May 15. A. C. Graw, Pres.; Wm. J. Carter and S. A. King, V.-Ps.; E. N. Gause, Cash.

Ga., Columbus.—Columbus Savings Bank has applied for charter changing name to Columbus Savings Bank & Trust Co., and will increase capital stock from \$200,000 to \$2,000,000. G. Gunby Jordan is Pres.; W. C. Bradley and H. B. Crowell, V.-Ps.; Henry P. Patterson, Treas.

Ky., Bowling Green.—Reported that the Bank of Woodburn has voted to consolidate with the Citizens' National Bank.

Ky., Stearns.—State Bank of Stearns, capital \$15,000, is chartered. John E. Butler, Harry C. Trent and Roger Henderson, incorporators.

Ky., Woodburn.—People's Bank, capital \$20,000, is incorporated by J. Hoyt Chaney, E. J. Keen, J. W. Travelstead, W. M. Sloss and others.

La., De Ridder.—De Ridder National Bank, capital \$100,000, has applied for charter. P. W. West and others.

Md., Baltimore.—Farmers' Finance Corp., capital stock \$200,000, is inceptd. Inceptrs.: Wm. S. Hill, Jas. C. Chaney, W. Mitchell Digges, Geo. W. Joy and W. Meade Holladay.

Md., Baltimore.—Red Star Building Assn., 700 Equitable Bldg., capital stock \$1,040,000, is inceptd. by Eldridge Hood Young, R. Walter Crothers and Samuel H. Folkoff.

Md., Baltimore.—New Peerless Building and Loan Assn., Inc., 1212 Pennsylvania Ave., capital stock \$100,000, is inceptd. by Charles Tolson, John F. Oliver, Chas. H. King and Lloyd H. Sample.

Md., Glyndon.—Glyndon Bank, capital stock \$10,000, is incorporated by John H. Zouck, Samuel H. Yeatts, Albert N. Smith, Lester S. Wheeler and John O. Cockey.

Md., Seat Pleasant.—Farmers and Mechanics' Bank has changed name to Southern Maryland Trust Co., with branches at Upper Marlboro and Prince Frederick. The company will have capital of \$100,000 and surplus of \$112,000.

Miss., Hermanville.—Claiborne Bank of Hoffmanville, capital \$15,000, is chartered; to begin business immediately. E. B. Barland, Pres.; Barland, Miss.; D. A. Lowe, V.-P.

Miss., Laurel.—Laurel Building Association, capital stock \$5,000, is chartered. Inceptrs.: Wallace B. Rogers, B. A. Schneider, M. W. McLaurin, W. S. Welch.

Miss., Newton.—Citizens' Bank, capital stock \$25,000, is being organized by H. L. Hollis, Pres. of the Farmers' Bank of Pittsboro.

Mo., St. Joseph.—Fidelity Trust Co., capital stock \$100,000, is incorporated; to begin business May 15; Dr. E. D. Holme, W. S. Kinnison, K. B. Randolph and others, directors.

N. C., Mt. Airy.—Farmers' Bank and Trust Co., authorized capital \$300,000, \$28,000 paid in, is inceptd. by J. H. Fulton, C. A. Shelton and G. L. Simmons.

N. C., Seagrove.—Bank of Seagrove, capital authorized \$25,000, subscribed \$10,000, is chartered by Frank Auman and others.

N. C., Smithfield.—National Trust Co., authorized capital stock \$100,000, \$10,000 subscribed, is chartered. J. D. Underwood, N. B. Grantham and F. K. Broadhurst.

Okla., Coalgate.—City National Bank, capital \$50,000, is chartered. J. I. Murray, Pres.; C. D. Bunch, Cash.

Okla., Locust Grove.—First National Bank, capital \$25,000, has applied for charter. Homer Drewry and others.

Okla., Slick.—First National Bank, capital \$25,000, has applied for charter. M. C. McDougal, care of J. B. Keely, Beggs, Okla.

Okla., Tillman.—A bank is reported being organized. Chamber of Commerce may give information.

S. C., Sumter.—Victory Building & Loan Assn., capital \$150,000, is chartered. C. G. Rowland, R. K. Wilder, Mrs. Mary B. Warren and others.

Tex., Dallas.—Dallas Trust Co., capital stock \$25,000, is chartered. E. J. Glover, H. L. Newby and L. B. Simmons, inceptrs.

Tex., Elkhart.—Farmers and Merchants' State Bank, capital \$30,000, surplus \$3000, is chartered; to begin business Apr. 15. Tucker Royall, Pres.; W. A. Weatherford and C. W. Hanks, V.-Ps.; Alpheus Hanks, Cash.

Tex., Houston.—San Jacinto Trust Co., capital stock \$100,000, is chartered; Geo. E. Howard, Pres.; J. O. Roots, Cash.

Tex., Paris.—Red River Valley Trust Co. is chartered; R. S. Bywaters, Pres., and Jas. P. Smith, Secy.

Tex., Plains.—Stockman's Exchange Bank, capital stock \$25,000, began business April 1; O. T. Bailey of Brownsville, Pres.; H. M. Pyett of Dallas, Cash.

Tex., Rio Grande City.—First National Bank will begin business shortly. Lawrence Brooks, Pres.; Geo. B. Marsh, Cash.

Tex., Rusk.—Citizens' Guaranty State Bank, capital stock \$50,000, is chartered; B. B. Perkins, Pres., and E. R. Gregg, Cash.

Tex., San Antonio.—Texas State Bank & Trust Co. is the new name adopted for the Laeud State Bank & Trust Co., 335 W. Commerce St., which, it is announced, has been acquired by Lee Joseph and associates. Pres., Lee Joseph; V.-P., A. L. C. Magruder; Cash., H. M. Compton; Chairman of the Board, W. W. Lipscomb. Capital \$100,000. Mr. Joseph is Pres. also of the Guaranty State Bank.

Va., Brookneal.—People's National Bank, capital \$25,000, has applied for charter. J. E. Webb and others.

Va., Tappahannock.—Southside Bank, changed from Southside Bank, inceptd.; capital \$50,000; surplus \$11,250. Jas. M. Lewis, Pres.; J. L. Henley and J. W. Faulconer, V.-Ps.; A. A. Cralle, Cash.

W. Va., Davy.—Bank of Davy, capital \$50,000, subscribed, is organized. Geo. Wolfe of Beckley, Pres.; Dr. J. H. Anderson of Marytown and R. D. Bailey of Baileyville, V.-Ps.

W. Va., Hurricane.—Hurricane National Bank, capital \$50,000, surplus \$5,000, chartered to begin business Apr. 12. J. S. Burdette, Pres.; W. H. Kirtley, V.-P.; L. D. Carter, Cash.

W. Va., Morgantown.—Commercial Bank, capital stock \$100,000, is chartered. Inceptrs.: W. H. Davis, R. A. West, F. B. Trotter, J. R. Trotter and others.

### New Securities.

Ala., Birmingham.—(Road).—Sold to the Alabama Bond Co. at par and interest and premium of \$1000, \$2,000,000 of 5 per cent \$1000 denomination 1924-1931 Jefferson County bonds, dated Apr. 15, voted Feb. 16 and offered Mch. 22. Jerry W. Gwin is Pres. Board of Revenue.

Ala., Gadsden.—(School).—Ordinance adopted to issue \$250,000 of 5 per cent \$500 denomination 30-year bonds voted Jan. 6 to be dated Apr. 15. W. P. Johnson, Mayor. R. M. Wilbanks, City Clk.

(Continued on Page 150.)

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.



## Lower Transportation Costs

**T**HE fast working Cletrac keeps a steady stream of raw material moving into the shops—hauls heavy loads of finished product to the piles or stock shed.

Over any ground—in all kinds of weather—the sturdy Cletrac hustles your yard jobs. It does *more hauling* and *more kinds* of hauling, the year 'round, at a maintenance and operating cost that is surprisingly low.

The "raw labor" shortage affects production costs in your plant. You'll find the solution of this problem in the dependable tank-type Cletrac.

**The Cleveland Tractor Co.**

*"Largest Producers of Tank-Type Tractors in the World"*

19187 Euclid Avenue

Cleveland, Ohio



Ala., Huntsville—(Refunding).—\$22,500 of 5 per cent refunding road bonds offered Mch. 10, but not sold, are to be re-offered about June 1, it is reported. Chas. H. Pulley is Prest. Board of Revenue.

Ark., Helena—(Road).—Sold to the Bank of Commerce, Memphis, Tenn., at par plus \$5000 premium, \$1,800,000 of Helena-Ferguson Road Dist., Phillips County, bonds. Address County Commrs.

Ark., Helena—(Paving).—Sold to the First National Bank of St. Louis at par \$490,000 bonds of Paving Dist. No. 14. Address County Commrs.

Ark., Hope—(Street).—Sold to Malone & Keesler at 98, \$140,000 of 6 per cent 1-15-year serial bonds of Hope Street Improvement Dist. No. 1, dated Mch. 15 and offered Mch. 25.

Ark., Little Rock—(Warrants).—Sold to P. W. Chapman & Co. of New York \$325,000 of 1-year city refunding warrants offered Mch. 5 and dated Mch. 25, 1920. Ben D. Brickhouse is Prest. Board Public Affairs.

Ark., Malvern—(Water and Sewer).—\$25,000 of Malvern Dist. bonds have been approved by the Arkansas Corporation Comsn. Address The Mayor.

Ark., Mena—(Paving).—Sold to three local banks, it is reported, at 96.50, \$30,000 of 6 per cent paving bonds. Address The Mayor.

Ark., Wynne—(Road).—Bids received until Apr. 8 for between \$165,000 and \$200,000 of 6 per cent Road Dist. No. 1, Cross County, bonds. J. L. Hase, Chrmn. Road Commrs. J. E. Holland, Secy.

Fla., Arcadia—(Road, Bridge).—Sold to A. C. Clewis of Tampa at 95 and accrued interest, \$65,000 of 6 per cent 1-30-year \$500 denomination bonds of Moore-Haven Special Road and Bridge Dist., De Soto County, offered Apr. 5 and dated Jan. 1.

Fla., Bradentown—(Bridge, Paving, etc.).—Voted Mch. 30, \$31,500 of 6 per cent 30-year \$500 denomination bonds. Address Harry Wadham, Commr. Public Works. L. L. Hine is City Clk.

Fla., Homestead—(School).—Election May 8 on \$25,000 of bonds. Address School Board.

Fla., Miami—(School).—Election May 8 on \$400,000 of Dade County bonds. Address R. E. Hall, Supt. of Schools.

Fla., Palmetto—(School).—\$35,000 of 5½ per cent \$1000 denomination 30-year bonds voted Mch. 9 will probably be offered for sale May 4. B. D. Gullett, Supt. of Schools, Bradentown, Fla.

Fla., Tavares—(Road and Bridge).—Bids will be received until noon May 3 for \$65,000 of 6 per cent bonds of Howey Special Road and Bridge Dist., Lake County, dated Jan. 1, 1917, and due 1947. Address T. C. Smyth, Clerk Board County Commrs.

Ga., Cordele—(School).—Sold to the American Bank & Trust Co. and the Exchange Bank of Cordele, jointly, at par and accrued interest, \$50,000 of 5 per cent 1930-1949 \$1000 denomination bonds, voted Nov. 18, 1919, dated Jan. 1, 1920, and offered April 7. G. S. Harris is City Treas.

Ga., Darien—(Road).—Election May 18 on \$15,000 of 4½ per cent \$500 denomination McIntosh County bonds, dated July 1, 1920. Address J. G. Legare, Clk. County Commrs.

Ga., Dublin—(School).—Reported that \$5000 of Dudley School Dist., Laurens County, bonds will soon be voted on. Address County School Board.

Ga., Jesup—(Road).—Voted Apr. 7 \$200,000 of 5 per cent \$1000 denomination 1930-1949 Wayne County bonds. Address Ira M. Raybon, Clk. County Commrs.

Ga., Metter—(Water-works, Pumping Plant.)

—Voted Apr. 3, \$35,000 of bonds. Address The Mayor.

Ga., Moultrie—(Paving, School, Sewer).—Sold to R. M. Berrien, Jr. & Co. of Atlanta, at \$105,279, \$105,000 of 5 per cent \$1000 denomination serial bonds, dated Apr. 1, voted Jan. 26 and offered Mch. 25 as follows: \$60,000 paving; \$35,000 school; \$10,000 sewer. J. S. Johnson is Mayor.

Ga., Savannah—(School).—Sold to the Hibernia Bank at .33679 and accrued interest \$500,000 of 4½ per cent 30-year serial bonds of Chatham County, dated Dec. 1, 1919, voted Oct. 7, 1919, and offered Mch. 29. Address County Commrs.

Ga., Swainsboro—(Water-works, Sewer).—Voted Apr. 5, \$50,000 water and \$25,000 sewer bonds. Address The Mayor.

Ga., Talbotton—(Road).—Voted Mch. 31, \$50,000 of Talbot County bonds. Address County Commrs.

Ga., Winder—(Sewer, Paving).—Voted April 5 \$17,000 sewer and \$35,000 paving bonds. Address Mayor John T. Maynard.

La., Crowley—(Road).—Bids will be received until Apr. 23, it is reported, for \$55,000 of 5 per cent 30-year Acadia Parish bonds. J. E. Daigle is Secy. Police Jury.

La., Edgard—(Revenue).—Bids will be received until 11 A. M. April 12 for \$85,000 of 5 per cent \$500 denomination 1920-1929 bonds of the Parish of St. John the Baptist. Address Augustin Lasseigne, Prest. Policy Jury.

La., Lafayette—(Road).—Election May 12 on \$36,000 of bonds. Address Police Jury.

La., Leesville—(Street).—No sale reported of \$20,000 of 5 per cent street-improvement bonds offered Mch. 16. Address The Mayor.

La., Natchitoches—(Improvement).—Bids will be received until 10 A. M. Apr. 15 for \$240,000 of 5 per cent \$500 denomination, serial 20-year bonds, dated Apr. 1 and voted Jan. 27. Address Mayor W. F. Johnson. L. P. Cloutier is City Secy.-Treas.

La., New Iberia—(School).—\$200,000 of 5 per cent \$1000 denomination 30-year serial bonds of School Dist. No. 6 voted Nov. 18 and offered Jan. 2 are reported unsold. L. R. Tilly is Supt. Parish School Board.

La., St. Martinsville—(School).—Special dispatch to Manufacturers Record says: All bids were rejected for \$300,000 of 5 per cent bonds of St. Martin's Parish offered April 1. Highest bid was 95 from the Bank of Lafayette, La. W. C. Perrault, Supt. of Schools.

Md., Salisbury—(School).—Election May 3 on \$300,000 of Wicomico County bonds. Address County Board of Education.

Miss., Clarksdale—(Paving, etc.).—Voted Apr. 2 \$500,000 of bonds. R. E. Stratton, Jr., is City Clk.

Miss., Grenada—(School).—Contemplated to issue \$125,000 of bonds. Address School Board.

Miss., Jackson—(School).—An election on \$75,000 city bonds has been authorized by the Legislature. Address Board of Education.

Miss., Lexington—(Paving).—Election Apr. 5 on \$32,000 of paving bonds. Address The Mayor.

Miss., Louisville—(Water, Sewer).—Bids will be received until May 4 for \$10,000 of 6 per cent 20-year \$100 and \$500 denomination bonds, dated May 1 and voted March 30. Address G. W. E. Bennett, Town Clerk.

Miss., Macon—(Road).—Bids will be received until 2 P. M. May 3 for \$50,000 of 6 per cent \$500 denomination bonds of Fourth Suprs. Dist., Noxubee County. Address John A. A. Tyson, Clerk Board of Suprs. For particulars see Proposals Department.

Miss., Meridian—(School).—Sold to J. E.

Blanks of Increase, Miss., \$5500 of 6 per cent \$500 denomination serial 1925-1935 bonds of Suqualena Consolidated School Dist., Lauderdale County, voted Feb. 24, dated Apr. 1 and offered Apr. 6. Geo. F. Hand is Clk. Chancery Court.

Miss., Meridian—(Auditorium).—An election is contemplated on bonds for an auditorium. Address The Mayor.

Miss., Pickens—(Electric-Light Extension).—An election has been called, it is reported, on \$10,000 bonds. Address The Mayor.

Miss., Tylertown—(Road).—At the election April 3 the \$50,000 Walthall County bonds failed to carry. Address County Commrs.

Mo., Carthage—(Water, Light).—\$100,000 of 5 per cent 20-year bonds failed to carry at the election Apr. 6. A special election will be called soon. Address The Mayor.

Mo., Platte City—(Drainage).—Sold to J. J. Frey & Co. of St. Louis, at 98.90, \$230,000 of 5½ per cent bonds of Platte River Drainage Dist. No. 1, Platte County, offered Mch. 26.

Mo., Republic—(School).—Sold to the Bank of Commerce of Springfield, Mo., at 100 plus \$144 premium, \$17,800 of 6 per cent 20-year \$1000 denomination bonds voted Feb. 24, dated Apr. 1 and offered Apr. 1.

Mo., Seymour—(School).—\$23,250 of Seymour School Dist. bonds reported voted Mch. 16. Address School Board.

Mo., Springfield—(School).—\$600,000 of 5 per cent \$1000 denomination 5-20-year bonds voted Apr. 5 will be offered on or about July 1. Address Board of Education.

Mo., Poplar Bluff—(School).—Voted April 6 \$30,000 of bonds. Address Board of Education.

N. C., Blowing Rock—(Street).—At the election Mch. 30 the \$15,000 bond issue failed to carry. Address The Mayor.

N. C., Charlotte—(School).—Contemplated to hold an election on \$30,000 of bonds for Hopewell, Trinity, Abernathy and Beach Cliff School Dist., Mecklenburg County. J. M. Matthews is County Supt. of Schools.

N. C., Charlotte—(School).—Contemplated to hold an election on from \$25,000 to \$30,000 of Derita Township, Mecklenburg County, bonds. Address J. M. Matthews, Supt. of Schools.

N. C., Elizabeth City—(School).—The offering of \$20,000 Weeksville Special School Dist., Pasquotank County, bonds reported on Apr. 5 has been postponed. Address M. P. Jennings, County School Supt.

N. C., Farmville—(Water, Sewer, Assessment).—Bids received until 2 P. M. Apr. 5 for the following 6 per cent \$1000 denomination bonds: \$25,000 water bonds, dated Jan. 1, 1920, 1923-1947, inclusive; \$15,000 sewer bonds, dated Jan. 1, 1920, 1923-1937; \$115,000 assessment bonds, dated Mch. 1, 1920. T. E. Joyner is Town Clk.

N. C., Gastonia—(School).—Election May 11 on \$5000 of 6 per cent 20-year bonds of Stanley School Dist. No. 1, Gaston County. Address County Commrs.

N. C., Graham—(School, Sewer).—All bids rejected for the \$150,000 of 6 per cent \$1000 denomination 1921-1950 town bonds dated Apr. 15 and offered Apr. 1, as follows: \$50,000 school and \$100,000 sewer. P. A. Holt is Town Clk.

N. C., Hamlet—(School).—\$100,000 of school bonds were voted recently. Address School Board.

N. C., Hendersonville—(School).—Voted recently \$10,000 of Ebenezer Dist., Henderson County, bonds. Address County Board of Education.

N. C., Hertford—(Road).—An issue of \$300,000 Perquimans County bonds has been decided on by the County Commrs.

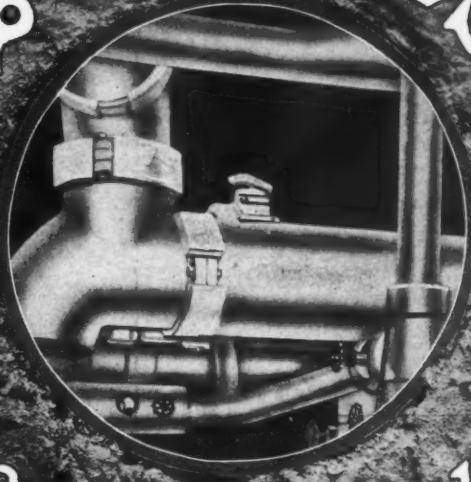
(Continued on Page 154.)

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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**"85% MAGNESIA"  
Pipe and Boiler Covering**



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Whether you *buy* heat-insulation for yourself, or *specify* it for a client you are bound to judge it by three tests:

**Durability      Efficiency      Economy**

Not merely for *NOW*, but for all the years to come.

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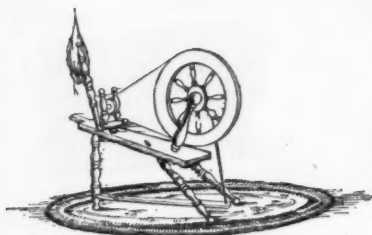
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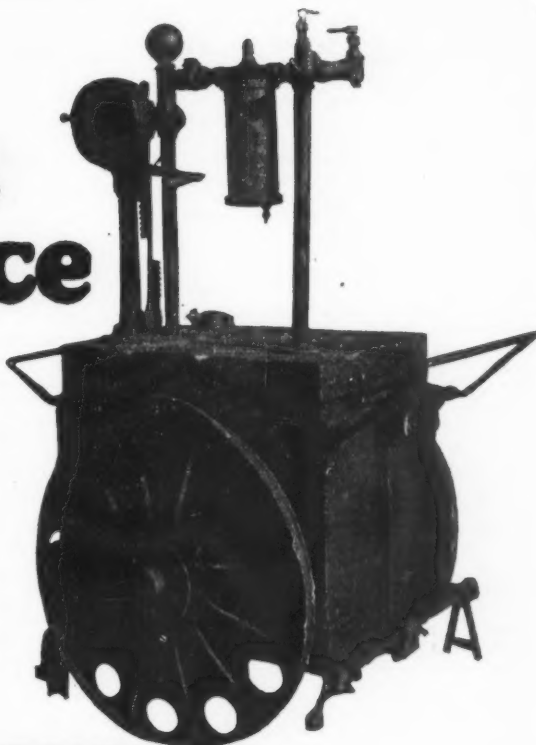
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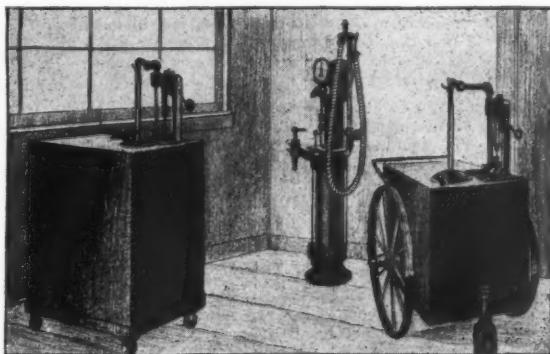
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*A national organization with offices in thirty-four American cities—repair stocks and expert service at your command—representatives everywhere.*

N. C., Hillsboro—(School).—Bids for \$25,000 of 6 per cent \$1000 denomination 1920-1940 Carrboro School Dist., Orange County, bonds voted Feb. 7, dated May 1 and offered Apr. 5 were not satisfactory, and the bonds will be reoffered May 10. Address R. H. Clayton, County Supt.

N. C., Louisburg—(Road).—Bids will be received until 2 P. M. May 12 for \$30,000 of 6 per cent 30-year bonds of Cypress Creek Township, Franklin County, dated June 1, 1920. J. P. Timberlake is Chrmn. County Commrs., and S. C. Holden, Clk.

N. C., Rutherfordton—(School).—Bids will be received until 2 P. M. Apr. 24 for \$9000 of 6 per cent \$1000 denomination 20-year bonds of Rutherford County, dated Mch. 1. Address W. R. Hill, County Supt. of Public Instruction.

N. C. Wake Forest—(Water, Sewer).—\$105,000 water and \$30,000 sewer bonds have been authorized by the Board of Commissioners of Wake Forest. Address E. W. Timberlake, Jr., Clk. Board Commrs.

N. C., Winston-Salem—(Water, Sewer).—Ordinances passed authorizing the issue of \$30,000 water, \$25,000 fire alarm and \$15,000 sewer 25-40-year bonds. Address W. H. Holcomb, Clk. Board of Aldermen.

Okl., Carnegie — (School). — \$40,000 bonds voted Mch. 2 have been sold.

Okl., Frederick—(Courthouse).—\$125,000 of Tillman County bonds were voted Apr. 8. Address County Commrs.

Okl., Hartshorne—(School).—\$50,000 of 5 per cent \$1000 denomination 25-year bonds voted Mch. 30 are being offered. Will Anderson is Prest. Board of Education, and W. J. Hulsey, Clk.

Okl., Hartshorne—(City Hall).—\$10,000 city bonds were voted Mch. 30. Address The Mayor.

Okl., Kelleyville—(School).—Bids will be received until Apr. 13 for \$50,000 of Creek County bonds voted Apr. 6. Address J. W. St. Sling, Secy. School Board.

Okl., Okmulgee—(Library).—Reported that \$50,000 of library bonds will be voted on soon. Address The Mayor.

Okl., Ponca City—(Water, Light, Fire).—Bids received until 8 P. M. Apr. 6 for the following 6 per cent \$1000 denomination bonds, dated Sept. 1, 1919: \$100,000 water-works extension (part of authorized issue of \$150,000); \$25,000 electric-light extension (part of authorized issue of \$50,000), and \$25,000 fire equipment bonds. Address C. B. Harrold, City Clk.

Okl., Taft—(Street).—\$7000 of 5 per cent 25-year bonds were voted Mch. 2. J. S. Springs, Mayor. Address Kelley Brown, Atty., Muskogee, Okla.

S. C., Abbeville—(Road).—Voted Apr. 3, \$450,000 of Abbeville County bonds. Address W. A. Stevenson, Secy. Highway Comsn.

S. C., Bishopville—(Paving).—Bids will be received until noon Apr. 21 for \$55,000 of 6 per cent bonds, dated April 1. Address W. S. James, Clk. and Treas. of Town.

S. C., Columbia—(Short-term Notes).—Special Dispatch to the Manufacturers Record says \$3,000,000 notes, interest 4.75 per cent, sold Apr. 8 to Palmetto National Bank of Columbia at par, proceeds to be deposited with it. Liberty National Bank of Columbia bid par for notes at 4.83% per cent. S. T. Carter is State Treas.

S. C., Clio—(School).—Election Apr. 19 on \$50,000 of not exceeding 6 per cent 20-year bonds of Clio School Dist. No. 9. Address Dr. C. S. Evans, A. L. Calhoun, Henry J. Bennett, Trustees.

S. C., Denmark—(Water-works).—\$50,000 of

6 per cent \$500 denomination 40-year bonds voted Jan. 15, dated and offered Mch. 15, are reported sold. Address J. S. Walker, Mayor.

S. C., Florence—(School).—Election Apr. 21 on \$95,000 of not exceeding 6 per cent 20-40-year bonds of Florence School Dist. Address N. W. Hicks, School Commr.

S. C., Greenville—(School).—Election April 28 on not exceeding \$250,000 of 5 per cent 20-year bonds. Address Geo. W. Sirrine, Secy. Board of Trustees.

S. C., Laurens—(Road).—Bids will be received until 10 A. M. Apr. 20 for \$150,000 of 5 per cent 1922-1947 Laurens County bonds, dated July 1, 1917. Address J. D. W. Watts, County Supervisor.

S. C., York—(School).—Voted Apr. 1, \$75,000 of not to exceed 6 per cent 20-year \$1000 denomination bonds of Rock Hill School Dist., York County, dated July 1. Address R. C. Burts, Secy. School Board.

Tenn., Clarksville — (School). — \$225,000 of city bonds are proposed by an ordinance in the City Council. Address The Mayor.

Tenn., Covington—(Road).—Bids will be received until 2 P. M. Apr. 26 for \$155,000 of 5½ per cent bonds of Tipton County. Address Judge John Y. Pette, Chrmn. Finance Comm.

Tenn., Rogersville—(School).—Bids received until 4 P. M. Apr. 7 for \$25,000 of 5 per cent \$500 denomination bonds dated Jan. 1, 1920. T. E. Beal is Recorder and Treasurer.

Tenn., Union City — (Road). — \$300,000 of Obion County bonds have been authorized by the County Court. Address County Commrs.

Tex., Amarillo—(Hospital).—Voted April 3 \$250,000 of 5½ per cent Potter County bonds. Address County Commrs.

Tex., Anahuac—(Road).—Bids will be received until Apr. 19, it is reported, for \$100,000 of 5½ per cent serial bonds of Chambers County. Joe F. Willson is County Judge.

Tex., Boerne—(Road).—Voted Mch. 20 \$40,000 of 5½ per cent 30-year serial road bonds of Kendall County Road Dist. No. 4. Address County Commrs.

Tex., Burnet—(Road).—Burnet County bonds have been registered as follows: \$15,000 Road Dist. No. 1 and \$55,000 Road Dist. No. 2, all 5½ per cent serial bonds. Address County Commrs.

Tex., Calvert—(School).—Bids will be received until 8.30 P. M. Apr. 27 for \$60,000 of 5 per cent \$1500 denomination 40-year serial Calvert Independent School Dist. bonds, dated Jan. 1, 1920, and voted Nov. 1, 1919. Address Prest. of the School Board.

Tex., Crockett—(Road).—\$30,000 of Houston County Road Dist. 5½ per cent serial bonds have been approved. Address County Commrs.

Tex., Coleman—(Road).—Bids received until 4 P. M. Apr. 13 for the following Coleman County bonds, 1 to 30 years serial, dated Feb. 1, 1920: \$500,000 5 per cent, Precinct No. 1, and \$100,000 5½ per cent, Road Dist. No. 1. L. G. Matthews is County Judge.

Tex., Conroe—(Water-works).—\$15,000 of 5 per cent 20-30-year bonds have been registered. Address The Mayor.

Tex., Crosbyton—(School).—\$71,000 of 5 per cent 20-40-year bonds of Ralls Independent School Dist., Crosby County, have been registered. Address Board of Education.

Tex., Dallas—(School, Sewer, Water, Hospital, Abattoir).—Voted April 6 the following 5 per cent 40-year serial bonds: \$1,500,000 school; \$400,000 sewer; \$400,000 water; \$225,000 hospital; \$175,000 abattoir. Address E. B. Reppert, Commr. of Finance and Revenue.

Tex., Dallas—(Levee).—\$50,000 of 6 per cent serial levee improvement bonds have been registered. Address County Commrs.

Tex., De Leon—(Water and Sewer).—\$200,000 of 6 per cent serial bonds have been registered. Address The Mayor.

Tex., Denton—(School).—Bonds have been registered as follows: \$5400 of Common School Dist. No. 68; \$8000 of Common School Dist. No. 89, Denton County; all 5 per cent 40-year. Address Board of Education.

Tex., Eastland—(Road).—\$1,000,000 of 5½ per cent serial special road bonds of Eastland County are reported registered. Address County Commrs.

Tex., El Paso—(School).—\$17,000 of El Paso County school bonds have been voted. Address Miss Myra Winkler, County School Supt.

Tex., Gainesville — (Road). — Bids received until 10 A. M. Apr. 12 for \$225,000 of 5 per cent 20-year serial \$1000 denomination bonds of Coke County Road Dist. No. 2, dated Apr. 10, 1920, and voted Sept. 27, 1919. John F. Cobble is County Clk.

Tex., Hico—(School).—Voted April 6 \$50,000 of Hico School Dist. bonds. Address School Board.

Tex., Hillsboro—(School).—\$12,000 of 5 per cent 10-40-year bonds of Hill County Common School Dist. No. 23 have been registered. Address Board of Education.

Tex., Lockhart—(School).—Voted April 3 \$200,000 of 40-year Lockhart Independent School Dist. bonds. Address Geo. W. Baker, Secy. School Board.

Tex., Madisonville—(Road).—\$50,000 of 5 per cent serial bonds of Madison County, Justice Precinct No. 2, have been approved. Address County Commrs.

Tex., Madisonville—(Street).—Sold to J. L. Arlitt of Austin \$10,000 of 6 3/5 per cent bonds, 1921-1939, dated Sept. 26, 1919.

Tex., Palestine—(Street).—Bids will be received until Apr. 15 for \$250,000 of 5½ per cent \$1000 denomination 10-40-year optional bonds, dated Apr. 1. A. L. Bowers is Mayor.

Tex., Palestine—(Paving).—Voted Mch. 16, \$750,000 of 5½ per cent bonds. Address The Mayor.

Tex., Paris—(Street, Fire, Sewer, Water).—The following bonds have been registered: \$150,000 street, \$100,000 fire department, \$50,000 sewer and \$100,000 water-works; all 5 per cent 10-40-year. Address The Mayor.

Tex., San Antonio—(Street).—\$17,500 of 5 per cent 10-40-year bonds have been registered. Address The Mayor.

Tex., Taylor — (School). — \$234,000 of town bonds were voted recently. Address School Board.

Tex., Terrell—(Water-works).—\$200,000 of 5 per cent serial bonds have been approved. Address The Mayor.

Tex., Tokio—(School).—\$6000 of 5 per cent 15-20-year bonds of Tokio Independent School Dist. have been registered. Address School Board.

Tex., Uvalde—(Road).—Bids will be received until 4 P. M. May 10 for \$450,000 of 5½ per cent Uvalde County bonds, as follows: \$250,000 Road Dist. No. 1 and \$200,000 Road Dist. No. 2. Address Deltzer H. Jones, County Judge. For particulars see Proposals Department.

Tex., Wills Point—(School).—\$10,000 of 5 per cent 20-40-year bonds of Wills Point Independent School Dist. have been registered. Address School Board.

Va., Bristol—(Street, Beaver Creek).—\$100,000 of bonds have been authorized by the City Council. Address The Mayor.

Va., Norfolk—(Water).—\$1,500,000 of 5 per cent bonds maturing Apr. 1, 1923, are reported being offered at 99.31 by the National City Co. and E. H. Rollins & Sons of New York.

## Financial Notes.

Va., Portsmouth—(Road and Bridge).—Bids will be received until noon May 1 for \$250,000 of 5 per cent 20-year \$1000 denomination Norfolk County bonds, dated May 1. Address G. Tayloe Gwathmey, Clk. Board of Supvrs.

Va., Wise—(Road).—Election Apr. 26 on \$300,000 of Richmond Dist., Wise County, bonds. Address County Commrs.

W. Va., Buckhannon—(Paving).—Election May 4 on \$50,000 of city bonds. Address The Mayor.

W. Va., Charles Town—(Street).—An election is contemplated on \$10,000 of bonds. Address The Mayor.

W. Va., Chapmanville—(School).—Election Apr. 24 on approximately \$25,000 of bonds. Address J. W. Barker, Secy. Board of Education.

W. Va., Grafton—(School).—\$49,000 of Flemington Dist., Taylor County, bonds failed to carry at the election Mch. 20. Address County Board of Education.

W. Va., Logan—(School).—Election Apr. 21 on \$45,000 of 5 per cent \$1000 denomination 1920-1940 bonds of Chapmansville Dist., Logan County. Address G. W. Hensley, Prest. J. W. Barker, Secy. Board of Education.

W. Va., New Martinsville—(School).—Election April 13 on \$139,000 of Magnolia Dist., Wetzel County, bonds. Address Board of Education.

W. Va., Ravenswood—(School).—\$62,000 bonds of Ravenswood Independent School Dist., Jackson County, have been voted. Address Board of Education.

W. Va., Webster Springs—(Road).—The State will purchase the \$250,000 of 5 per cent 10-year Webster County bonds voted Mch. 23. R. J. McGuire.

First National Bank of Del Rio, Tex., has increased capital from \$75,000 to \$100,000.

Farmers' National Bank of Cushing, Okla., has increased capital from \$25,000 to \$50,000.

Conroe State Bank, Conroe, Tex., has increased capital stock from \$32,500 to \$40,000.

Hampshire Bank of Columbia, Tenn., has increased capital from \$7500 to \$10,000.

People's Bank, Stephens City, Va., has increased capital stock from \$10,000 to \$50,000.

National Bank of Baltimore, Md., will increase capital stock from \$1,210,700 to \$1,500,000.

First National Bank of Hopkinsville, Ky., has increased capital from \$75,000 to \$100,000.

Farmers' National Bank of Gonzales, Tex., has increased capital from \$50,000 to \$100,000.

Planters' National Bank of Richmond, Va., has increased capital from \$600,000 to \$1,000,000.

First National Bank of Brooksville, Fla., has increased capital from \$25,000 to \$50,000.

National Bank of Leesville, S. C., has increased capital from \$25,000 to \$50,000.

First National Bank of Hampton, Ga., has increased capital from \$30,000 to \$50,000.

First National Bank of Newark, Ark., has increased capital from \$25,000 to \$50,000.

Bank of Sulligent, Ala., will increase capital stock from \$20,000 to \$50,000.

First National Bank of Bristol, Va., has increased capital from \$100,000 to \$200,000.

Blanket State Bank, Blanket, Tex., has increased capital stock from \$13,000 to \$15,000.

City Bank & Trust Co., Norfolk, Va., will increase capital stock from \$200,000 to \$500,000.

American Exchange Bank of Norfolk, Va.,

has increased capital stock from \$100,000 to \$200,000.

Citizens' Savings and Loan Corp., Lynchburg, Va., will increase capital from \$100,000 to \$150,000.

San Benito Bank and Trust Co., San Benito, Tex., has increased capital stock from \$50,000 to \$65,000.

Farmers' State Bank of Vernon, Tex., has increased capital from \$50,000 to \$100,000, and surplus from \$20,000 to \$50,000.

Central National Bank of Albany, Ala., will increase capital stock from \$100,000 to \$200,000.

American National Bank of Wichita Falls, Tex., has increased capital from \$100,000 to \$200,000.

Empire Trust Company, St. Joseph, Mo., has increased capital stock from \$100,000 to \$200,000.

Bowman, Cost & Co., investment bankers, 506 Olive St., St. Louis, have issued a reprint of an article of general interest, "What Is My Liberty Bond Worth?" which merits popular attention. A copy will be sent to anyone requesting it.

According to a statement from Austin, Tex., the resources of State banks and trust companies in Texas on Feb. 28 amounted to \$411,165,080, or \$6,034,131 more than on Dec. 31 last. Deposits amount to \$336,192,842, an increase of \$4,482,615. There are 964 State banks and trust companies.

Blair & Co., Inc., 24 Broad St., New York, has been organized to underwrite and deal in investment securities as successor to the firms of Blair & Co. and William Salomon & Co. C. Ledyard Blair is chairman and Elisha Walker, president. Branch offices maintained by the old firms in 11 cities in the United States will be continued and foreign representation will also be maintained in London.



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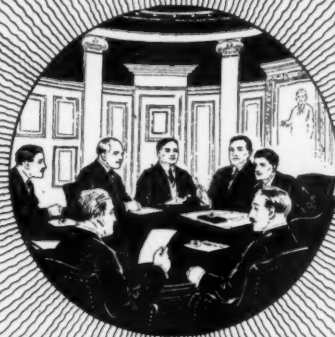
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